



11643 VANOWEN STREET • NO. HOLLYWOOD, CA 91605 • (818) 765-4992 • FAX 818-503-9708

EMAIL : INFO@ALLANAIRCRAFT.COM

MANUFACTURERS AN, AS, KC, MS AND SPECIAL FITTINGS
"SPECIALISTS IN STAINLESS STEEL and EXOTIC ALLOYS"



July 12, 2006

Kim Muratore, Case Developer (SFD-7-B)
U.S. EPA, Region 9
75 Hawthorne, CA 94105

Re: Information Request Letter for the San Fernando Valley/No. Hollywood
Superfund Site.

Dear Kim Muratore:

The information contained herein completes the questions in your Information Request B that were not sent on June 16, 2006. They are questions 5, 11, 21, 22, 23, 24 and 34.

Enclosed are soil sample and analytical results from Smith-Emery. Their Summary and Conclusion indicate contamination levels ranging from none to minimal amounts that are less than are allowed in California drinking water. Their conclusion noted "these contaminant levels do not indicate sufficient cause for further investigation" and "it is our opinion that no threat to groundwater supplies exists at this facility and we recommend no further action".

I thought this matter was already closed as far as Allan Aircraft Supply Company was concerned. Enclosed is a letter from the United States Environmental Agency stating that "you will not be asked to participate in the regional groundwater cleanup projects and that your company is no longer part of Superfund process". Also enclosed is a letter from the California Regional Water Quality Control Board stating that "no further requirements are necessary for Allan Aircraft".

I hope the information provided will be sufficient to allow this matter to be closed.

Sincerely,

Robert Kahmann
General Manager

ENCLOSURE B: INFORMATION REQUEST

07/10/06

21. No hazardous or chemical material inventory forms have been required to be submitted to city, county or state agencies.

22. Lubricants, coolants and cleaning solution list with Material Safety Data Sheets attached. Handling, storage and removal procedures.

- a. 111 Trichloroethane.
- b. Armakleen.
- c. LPS Precision Clean.
- d. Hyspin AWS 32.
- e. Hyspin AWS 68.
- f. Clearedge 6519.
- g. Microchip.
- h. Hydraulic Oil ISO VG 150.
- i. Kleen 3625
- j. Hyspin R&O 220
- k. Chip removal and storage.
- l. Representative waste manifests

No Material Safety Data Sheets found for Safety Cool 822C, W329 Coolant, Hydraulic Oil 4225, 500 Hangstefers Coolant. However, the same procedures were followed for handling, storage and removal.

23. Information included in 22.

24. Environmental data included in 34.

34. Copies of correspondence with California Regional Water Quality Control Board, United States Environmental Protection Agency, Smith-Emery Company, City of Los Angeles.

ENCLOSURE B: INFORMATION REQUEST

07/11/06

5. Allan Aircraft Supply Company is a General Partnership.

11. Ownership History

1952 – 1985

FX-4 CBI Determined

1985 – 1997

FX-4 CBI Determined

1997 – 2003

FX-4 CBI Determined

2003 – 2005

FX-4 CBI Determined

2006 –

FX-4 CBI Determined



California Regional Water Quality Control Board

Los Angeles Region

#54



Terry Tamminen
Secretary for
Environmental
Protection

320 West Fourth Street, Suite 200, Los Angeles, California 90013
(213) 576-6600 • Fax (213) 576-6640
<http://www.swrcb.ca.gov/rwqcb4>

Arnold Schwarzenegger
Governor

December 23, 2003

Mr. Bob Kahmann
Allan Aircraft Supply Co.
11643 Vanowen Street
North Hollywood, California 91605

NO FURTHER REQUIREMENTS FOR CHROMIUM VI INVESTIGATION, ALLAN AIRCRAFT SUPPLY CO., 11643 VANOWEN STREET, CALIFORNIA 91605 (FILE NO. 111.0078)

Dear Mr. Kahmann:

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter Regional Board) has conducted an evaluation of your facility to determine the extent of heavy metal use including chromium compound use and to assess current and past chemical handling, storage and disposal practices. A site inspection was conducted by Regional Board staff on August 22, 2001 to verify site specific information provided in your Chemical Use Questionnaire (CUQ) and to update our historical records for the subject site.

Based on your chemical and material use and other information provided to Regional Board staff during the site inspection, Allan Aircraft Supply Co. is among those companies in the San Fernando Valley receiving a Regional Board "No Further Requirements for the Chromium VI investigation" letter. The letter is being issued to Allan Aircraft Supply Co. because your facility was placed into one of the following categories: 1) information provided in your CUQ, which disclosed chemicals or materials with little or no chromium compounds; 2) results of the Regional Board staff inspection, which disclosed that the chemicals or materials being used contained little or no chromium compounds; or 3) completed onsite assessment work indicated insignificant or no chromium contaminants in or to the soil.

The purpose of this letter is inform you that, based on the site inspection and other information provided to Regional Board staff, and with the provision that the information was accurate and representative of the site conditions during the site inspection, we have determined that no further requirements are necessary for Allan Aircraft Supply Co. regarding the Chromium VI Investigation being conducted in the San Fernando Valley Groundwater Basin. However, if soil and groundwater contamination is encountered during any future activities, you are required to submit a written notification report to this Regional Board within 72 hours of its discovery.

California Environmental Protection Agency

Mr. Bob Kahmann
Allan Aircraft Supply Co.

- 2 -

December 23, 2003

The jurisdictional requirements of other agencies, such as the United States Environmental Protection Agency (USEPA), are not affected by this Regional Board's "No Further Requirements" determination. Such agencies may choose to make their own determination concerning this site.

We would like to take this opportunity to thank you for your full cooperation with the Regional Board during the course of the Chromium VI Investigation. Your patience and willingness to respond to inquiries concerning the investigation are greatly appreciated.

Should you have questions or wish to discuss details, please contact Mr. Dixon Oriola at (213) 576-6803, or Mr. Mohammad Zaidi at (213) 576-6732.

Sincerely,



Dennis A. Dickerson
Executive Officer

cc:

Mr. Robert Sams, Office of the Chief Counsel, SWRCB
Ms. Vera Melnyk Vecchio, California Department of Health Services
Ms. Sayareh Amirebrahimi, Department of Toxic Substances Control
Mr. David Stensby, USEPA Region IX, San Francisco
Mr. Mark Mackowski, Upper Los Angeles River Area Watermaster,
Mr. Roger Baker, City of Burbank Planning Department
Mr. Don Froelich, City of Glendale Water Services Administrator
Mr. Con Howe, City of Los Angeles, Director of Planning
Mr. Andrew Adelman, City of Los Angeles, Department of Building and Safety
Mr. Tom Erb, Water Resources Business Unit Director, City of Los Angeles
Mr. Pankaj Parekh, Environmental Affairs Office, City of Los Angeles



Winston H. Hickox
Secretary for
Environmental
Protection

California Regional Water Quality Control Board

Los Angeles Region

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640
Internet Address: <http://www.swrcb.ca.gov/~rvqcb4>



Gray Davis
Governor

#34
#21
#22

111.007

11-29-00

CHEMICAL STORAGE AND USE QUESTIONNAIRE

CHROMIUM INVESTIGATION

I. Facility information

II. Company name: Allen Aircraft Supply Co

1. Company address: 11643 Vanowen St Unit No. _____

2. City: N. Hollywood Zip code: 91605 Phone: (818) 765-4992

3. Standard Industrial Classification (SIC): 3494

4. Brief description of business:

Manufacture and package tube fittings

5. EPA Generator Number: CAL000027854 Years in business at this location: 40

6. Answer the following questions relative to present operations:

A. Do you do plating or manufacture circuit boards?

____ Yes ☒ No

If yes, please explain:

B. Do you have plating or anodizing tanks?

____ Yes ☒ No

C. Do you perform any metal work?

☒ Yes ☒ No

D. Do you have a clarifier, sump, tank or other holding tanks for waste water?

☒ Yes ____ No

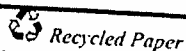
E. Do you have an industrial waste permit for sewer discharge?

____ Yes ☒ No

F. Do you store chemicals at this location?

☒ Yes ____ No

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations

G. Has any soil, waste water and/or groundwater investigations been conducted on the property?

☒ Yes ☐ No

If so, by what state or local agency? Calif. Regional Water Quality Control Board

8. Answer the following questions regarding **past** operations:

A. Do you know if plating operations existed at this location? ☐ Yes ☒ No

If yes, please explain:

No Plating operation has existed at this location

B. Did you once have plating or anodizing tanks?

☐ Yes ☒ No

C. Did you perform any metal work?

☒ Yes ☐ No

D. Did you have a clarifier, sump, tank or other holding tanks for waste water?

☒ Yes ☐ No

E. Did you have an industrial waste permit for sewer discharge? ☐ Yes ☒ No

F. Did you have a drum storage area?

☒ Yes ☐ No

G. Have any soil, waste water and/or groundwater investigations been conducted on the property?

☒ Yes ☐ No

9. Name(s) of former tenants(s), dates of operation and type of business (provide a separate sheet if necessary).

Company Name	Type of Business	Dates of Operation at the Site
<u>Kontide Floors</u>	<u>Vinyl Floor Tiles</u>	<u>1960's ?</u>

10. List all processes in which metallic compounds (derived from the elements listed in Table 1) are used.

None

II. Property owner information

1. Name of current property owner: Vanowen Group LLC
2. Mailing address of property owner: 11643 Vanowen St.
3. City: W. Hollywood Zip code: 91605 Phone: (818) 765-4992

4. Prior property owner(s) and the dates of their ownership

Property Owner	Dates of Ownership	
	From	To
<u>Mr + Mrs Wake Hunt</u>	<u>1950 ?</u>	<u>7-16-97</u>

III. Waste Management

1. What are the sources of industrial waste from the site? (Identify sources by process, composition of wastes generated and approximate quantity disposed of monthly).

Small amounts of lubricating oil from lathes, synthetic cutting solutions mixed with water in lathes, and cleaning solutions mixed with water to wash fittings. Generate approximately 166 gallons per month and dispose of twice a year.

IV. Sewer Information

1. ☐ Industrial ☐ Septic tank ☒ Municipal ☐ Cesspool
2. Was a different sewer system used in the past? ☐ Yes ☒ No
If yes, specify type _____

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: Blended Compound
2. Common/Trade name: LPS Precision Clean Quantity stored: 55 gal
3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling
5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
6. Is the waste stored prior to disposal? ☒ Yes ☒ No
7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No

-
1. Chemical name: _____
2. Common/Trade name: Aqual Works MPC Concentrate Quantity stored: 18 gal
3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling

California Environmental Protection Agency



Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: Kleen 3625 Quantity stored: 55 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: Lubricating Oil
 2. Common/Trade name: AW 68 Quantity stored: 55 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: Micro Chip Quantity stored: 55 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling _____
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: Clear Edge 6519 Quantity stored: 55 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling _____
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: Lubricating Oil
 2. Common/Trade name: AW32 Quantity stored: 55 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify)
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: Hi Spin Oil
 2. Common/Trade name: RO 220 Quantity stored: 5 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify)
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: SafetyCool 822C Quantity stored: 10 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling _____
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: W329 Coolant Quantity stored: 55 gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify) _____
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling _____
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: Oil
 2. Common/Trade name: 4225 Hydraulic Oil Quantity stored: 1100pl
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify)
 4. Waste disposal: ☐ Sewered ☐ Onsite recycling
☒ Hauled ☐ Offsite recycling
 5. Is the waste treated prior to disposal? ☐ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: 500 Hangstefus Calant Quantity stored: 55gal
 3. Storage method: ☐ Underground tank ☒ Drums
☐ Above ground tank ☐ Other (specify)
 4. Waste disposal: ☐ Sewered ☒ Onsite recycling
☐ Hauled ☐ Offsite recycling
 5. Is the waste treated prior to disposal? ☐ Yes ☐ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☐ Yes ☐ No
 7. Is manifest documentation available for designated waste streams? ☒ Yes ☐ No
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: 1,1,1 Trichloroethylene
 2. Common/Trade name: _____ Quantity stored: 300
 3. Storage method: _____ Underground tank ☒ Drums
☒ Above ground tank _____ Other (specify) _____
 4. Waste disposal: _____ Sewered _____ Onsite recycling
☒ Hauled _____ Offsite recycling _____
 5. Is the waste treated prior to disposal? _____ Yes ☒ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? ☒ Yes _____ No
 7. Is manifest documentation available for designated waste streams? _____ Yes ☒ No
Stopped using in 1970's
-

V. Chemical Storage and Use

Complete the following sections for all chemicals (inorganic compounds only) in current use or that have been used in the past. Add separate sheets to complete your listing.

1. Chemical name: _____
 2. Common/Trade name: _____ Quantity stored: _____
 3. Storage method: _____ Underground tank _____ Drums
_____ Above ground tank _____ Other (specify) _____
 4. Waste disposal: _____ Sewered _____ Onsite recycling
_____ Hauled _____ Offsite recycling _____
 5. Is the waste treated prior to disposal? _____ Yes _____ No
If yes, specify treatment method: _____
 6. Is the waste stored prior to disposal? _____ Yes _____ No
 7. Is manifest documentation available for designated waste streams? _____ Yes _____ No
-



#34

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
101 Centre Plaza Drive
Monterey Park, CA 91754-2156

May 31, 1996

JUN - 4 1996

ALLAN AIRCRAFT SUPPLY CO.
11643 VANOWEN ST.
NORTH HOLLYWOOD, CA 91605
File Number: 111.0078

RE: San Fernando Valley Superfund Areas
U.S. EPA and LARWQCB Notification of No Further Action

For property located at:

ALLAN AIRCRAFT SUPPLY CO.
11643 VANOWEN ST.
NORTH HOLLYWOOD, CA 91605-
File Number: 111.0078

Dear Owner/Operator,

The California Regional Water Quality Control Board, Los Angeles Region ("Regional Board") staff has conducted an assessment of your facility to determine the extent of solvent usage and to assess past and current chemical handling, storage and disposal practices. Your company is among those in the San Fernando Valley which have received the Regional Board's "No Further Action" letters based on one or more of the following categories: 1) information provided in your pre-inspection questionnaire disclosed little or no solvent use; 2) the results of a staff inspection disclosed no solvent use; or 3) completed assessment work indicated no solvent contamination in the soil.

The purpose of this letter is to inform you that, based on the information provided to U.S. EPA by the Regional Board to date, you will not be asked by the U.S. EPA or the Regional Board to participate in regional groundwater cleanup projects currently planned for San Fernando Valley. Your company is no longer part of the U.S. EPA Superfund process, and the Regional Board and the U.S. EPA plan no further action concerning your facility.

You may be contacted by those potentially responsible parties ("PRPs") that have been asked to participate in the groundwater cleanup efforts. In the event you are contacted by PRPs, please feel free to contact the appropriate Regional Board or U.S. EPA staff for additional information or assistance. The telephone numbers of Regional Board and U.S. EPA staff are provided on the enclosed contact list.

Sincerely,

Keith A. Takata

Keith A. Takata
Director
Superfund Division
U.S. EPA, Region 9

Robert P. Ghirelli

Robert P. Ghirelli, D. Env.
Executive Officer
California Regional Water Quality
Control Board, Los Angeles Office

enclosure

BOARD OF PUBLIC WORKS
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ROBERT S. HORII
CITY ENGINEER
ROOM 800, CITY HALL
LOS ANGELES, CA 90012

April 21, 1992

Attention Potential Industrial Stormwater Dischargers:

Subject: **CALIFORNIA GENERAL NPDES PERMITS FOR
INDUSTRIAL STORMWATER DISCHARGERS**

The City of Los Angeles, Department of Public Works, Stormwater Management Division has identified your facility as one which may be required to obtain coverage under the California General Industrial Stormwater Permit (GISP). This GISP is a new federal regulatory program which is being implemented by the State of California. The City of Los Angeles is only notifying you of this program as part of our responsibility as a local public agency and is not regulating the permit program.

We have identified the type of industrial activity which takes place at your facility by using the Standard Industrial Classification (SIC) Code as it appears in our computer database. Our best available computer records indicate that your facility's SIC Code falls under Category (xi) of the Federal Stormwater Regulations. As noted in the attached Fact Sheet, your facility will require a GISP only if portions of your facility operation take place outside and are exposed to rain.

Your facility's suggested SIC Code is shown on the upper right corner of the mailing label. Please note, however, that the City of Los Angeles does not assign your facility's SIC Code. You should verify the accuracy of our records and determine your actual SIC Code by referring to the SIC manual as noted on the attached Fact Sheet. For your information, your facility's SIC code is not reported to the State Water Resource Control Board (SWRCB).

Although the March 30, 1992 deadline to submit the Notice of Intent (NOI) has passed, the SWRCB will continue to accept NOI submittals. A brief explanation on why the filing was delayed should be stated along with the NOI.

The attached Fact Sheet provides pertinent information and should answer any questions you may have. City staff are available should you have additional questions.

Sincerely,

ROBERT S. HORII
City Engineer

By *Philip L. Richardson*
PHILIP L. RICHARDSON
Division Engineer
Stormwater Management Division

*Entire operation is indoor.
Rainwater runoff is not contaminated.
GISP does not apply.*
5/20/92

a:caxifac2.ltr

ADDRESS ALL COMMUNICATIONS TO THE CITY ENGINEER

AN EQUAL EMPLOYMENT OPPORTUNITY - AFFIRMATIVE ACTION EMPLOYER

Recyclable and made from recycled waste



10-27-92

ANALYTICAL RESULTS

<u>Sample I.D.</u>	<u>VOC's by EPA 8260 (Ug/kg)</u>	<u>TRPH by 418.1 (Mg/kg)</u>
B7-20'-#3	Methylene Chloride 2.8 Toluene 1.6	ND
B7-26'-#4	Methylene Chloride 3.1 Toluene 1.8	11
B7-31'-#5	Methylene Chloride 3.2 Toluene 1.3	2.7
B7-36'-#6	Methylene Chloride 2.7	3.6
B7-42'-#7	Methylene Chloride 3.1	5.1
B8-10'-#8	Methylene Chloride 3.7	2
B8-15'-#9	Methylene Chloride 4.1	180
B8-20'-#10	Methylene Chloride 2.9	ND
B8-25'-#11	Methylene Chloride 3.7	4.4
B8-30'-#12	Methylene Chloride 2.5	14
B8-35'-#13	Methylene Chloride 3.4	57
B8-40'-#14	Methylene Chloride 2.8 Toluene 4.5	9.7
B9-10'-#15	Methylene Chloride 3.2 Toluene 3.1	3.4
B9-15'-#16	Methylene Chloride 3.1	ND
B9-20'-#17	Methylene Chloride 3.6	ND
B9-25'-#18	Methylene Chloride 2.7 Toluene 1.8	ND
B9-30'-#19	Methylene Chloride 2.4	ND
B9-35'-#20	Methylene Chloride 2.6 Toluene 1.4	ND
B9-40'-#21	Methylene Chloride 2.6 Toluene 2.4	ND
B10-10'-#22	Methylene Chloride 2.6 Toluene 6.5	50
B10-15'-#23	Toluene 3.0	ND
B10-20'-#24	Methylene Chloride 2.6 Toluene 2.9	ND
B10-25'-#25	Methylene Chloride 2.3	ND
B10-30'-#26	Methylene Chloride 2.6 Toluene 1.9	ND
B10-35'-#27	Methylene Chloride 3.3	ND
B10-40'-#28	Methylene Chloride 2.4	ND

Mg/Kg = Milligrams/Kilogram = Parts Per Million (ppm)
 Ug/Kg = Micrograms/Kilogram = Parts Per Billion (ppb)

SUMMARY AND CONCLUSIONS

In accordance with RWQCB requirements, four borings were drilled to approximately 40 feet below ground surface on October 1, 1992 to obtain samples for contaminant analysis. The locations of the borings in relation to the existing structure are shown on the Plot

SMITH-EMERY COMPANY

Plan, Plate 2. Subsurface soils were found to be mainly sands with occasional cobbles. No groundwater was encountered, and no evidence of contamination was noted in the field. All borings were backfilled with bentonite grout and topped with asphalt.

The samples were transported in a chilled state to Smith-Emery Company's certified laboratory the same day for storage. Analysis was by EPA method 8260 for volatile organic compounds followed by EPA 418.1 analysis for Total Recoverable Petroleum Hydrocarbons (TRPH). Original laboratory results and quality control information are presented in the appendices.

Trace amounts of methylene chloride were noted in all samples from all depths with the exception of sample B10-15'-23. Statistical analysis indicates the results are remarkably similar, with an average of 2.96 ug/kg and a standard deviation of 0.46 ug/kg. We have determined that the reagent blanks also indicated similar levels of methylene chloride, no methylene chloride was detected in the earlier work done on this site, and no methylene chloride has ever been used at the facility. It is therefore our opinion that these results are due to background laboratory contamination and are not representative of actual site conditions.

SMITH-EMERY COMPANY

Total Recoverable Petroleum Hydrocarbon levels ranged from non-detect to 180 mg/kg. Only one sample exceeded 100 mg/kg, the sample from 15 feet below ground surface in boring B8. Borings B9 and B10 had only minor (3.4 and 50 mg/kg) TRPH results at 10 feet below ground surface with no detectable amounts at greater depths. Boring B7 was similar to B8 with minor (less than 12 mg/kg) TRPH levels. It has been our experience that for sites in industrial areas with deep groundwater, TRPH under 1,000 mg/kg is not required to be remediated.

Toluene was detected in B7 at 20, 26 and 31 feet below ground at 1.3 to 1.6 ug/kg with no detectable amount at 36 or 42 feet. Toluene was detected only at 40 feet below ground in B8 at 4.5 ug/kg. B9 had toluene detected at levels between non-detectable and 3.1 ug/kg. In boring B10 toluene levels were reported as 6.5 ug/kg at 10 feet, 3.0 at 15 feet, 2.9 at 20 feet, and 1.9 at 30 feet below ground.

No indication of chlorinated solvents noted in the earlier work was found during the course of this investigation. Very low levels of toluene (non-detectable to 6.5 ug/kg) appear to be prevalent about the site with no clear source noted. TRPH contamination appeared confined to the area below the staining to the east of the compressor, with only shallow (10 foot) TRPH results near the storage bins and tanks. The current Action Level in California for toluene in drinking water, generally the strictest standard, is 100 ug/kg.

SMITH-EMERY COMPANY

It is our opinion, based on these results, our previous work at this facility, and our professional experience, that these contaminant levels do not indicate sufficient cause for further investigation.

LIMITS OF LIABILITY

The findings, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our investigation, and we further assume the explorations to be representative of subsurface conditions throughout the site.

This report was prepared solely for the use of Allan Aircraft Supply Company. The factual data and interpretations pertain to the specific project described in this report and any reliance on this document by any other person or entity shall be at that party's sole risk.

Our investigation was performed using the standard of care and level of skill ordinarily exercised under similar circumstances by reputable Environmental Assessors and Geologists currently practicing in these or similar localities. No other warranty, express or implied, is made as to the conclusions and professional advice included in this report.

SMITH-EMERY COMPANY

The following plates and appendices complete this report:

Appendix I - Plates

- Plate 1 - Vicinity Map
- Plate 2 - Plot Plan
- Plate 3 - Cross Section
- Plate 4 - Key to Log of Borings
- Plate 5 - Unified Soil Classification System
- Plate 6-9 - Boring Logs

Appendix II - Laboratory Results

Quality Control Data

Appendix III - References

Respectfully submitted,

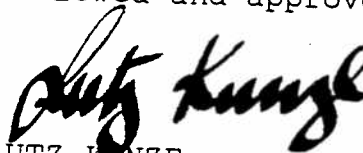
SMITH-EMERY COMPANY



BRIAN PRIMEAU
Environmental Assessor



Reviewed and approved by

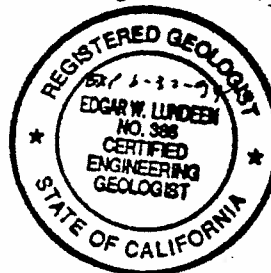


LUTZ KUNZE
P.E. C-25801, R.G.E. 493
Registered Geotechnical Engineer
Registered Civil Engineer



EDGAR W. LUNDEEN
RG 984, CEG 386
Registered Geologist
Certified Engineering Geologist

BP:EWL:LK/ss



SMITH-EMERY COMPANY

#34
#24

02-13-92

SUMMARY AND CONCLUSIONS

In accordance with RWQCB requirements, six borings were hand augered to approximately 10 feet below ground surface on January 10th and 13th, 1992 to obtain samples for initial contaminant analysis. The location of the borings in relation to the existing structure is shown on the Plot Plan, Plate 2. Subsurface soils were found to be mainly sands with occasional cobbles. No groundwater was encountered and no evidence of contamination was noted in the field. All borings were backfilled with bentonite and topped with either asphalt or concrete as appropriate.

The samples were transported in a chilled state to Smith-Emery Company's certified laboratory the same day for storage. Analysis was by EPA method 8260 for volatile organic compounds followed by EPA 418.1 analysis for Total Recoverable Petroleum Hydrocarbons (TRPH). Original laboratory results and quality control information are presented in the appendices. Analysis indicated the presence of minor amounts of toluene (<45 ppb), ethylbenzene (<25 ppb), perchloroethylene (<8 ppb), trichloroethene (<2 ppb), and xylene isomers (<4 ppb) in some samples.

Based upon these analytical results, it is our opinion that no threat to groundwater supplies exists at this facility and we recommend no further action.

SMITH-EMERY COMPANY

ANALYTICAL TESTING SCHEDULE

In accordance with RWQCB requirements all samples were analyzed for volatile organics by EPA 8260 followed by EPA 418.1 analysis for total petroleum hydrocarbons. Please refer to the Appendices for the original laboratory results and quality control information.

ANALYTICAL RESULTS

<u>Boring I.D.</u>	<u>TRPH by 418.1 (Mg/kg)</u>	<u>VOC's by EPA 8260 (Ug/kg)</u>
B1-1'-#1	2.8	Toluene 9.4
B1-5'-#2	36	Toluene 43; PCE 1.8; Ethylbenzene 1.4; P, M-xylenes 1.5
B1-9'-#3	4.0	Toluene 6.3
B2-1'-#1	ND	TCE 1.5; Toluene 20; PCE 2.7
B2-5'-#2	ND	ND
B2-10'-#3	ND	Toluene 4.0
B3-1'-#1	ND	PCE 2.7; Ethylbenzene 1.4; P, M-xylenes 1.7
B3-5'-#2	ND	Toluene 5.0
B3-9'-#3	ND	Toluene 5.8
B4-1'-#1	ND	Toluene 44; PCE 7.3
B4-5'-#2	ND	Toluene 3.0
B4-9'-#3	ND	Toluene 9.7
B5-1'-#1	ND	PCE 3.3; Ethylbenzene 24; P, M-xylenes 3.6; O-xylene 1.5
B5-5'-#2	8.0	Ethylbenzene 0.52; P, M-xylenes 0.84
B5-9'-#3	6.0	ND
B6-1'-#1	3.6	Toluene 2.1; P, M-xylenes 1.0;
B6-5'-#2	4.0	ND
B6-10'-#3	8.0	ND

Mg/Kg = Milligrams/Kilogram = Parts Per Million (ppm)

Ug/Kg = Micrograms/Kilogram = Parts Per Billion (ppb)

PCE - Perchloroethylene (tetrachloroethylene)

TCE - Trichloroethene

SMITH-EMERY COMPANY

LIMITS OF LIABILITY

The findings, conclusions and recommendations contained in this report are based on site conditions as they existed at the time of our investigation, and we further assume the explorations to be representative of subsurface conditions throughout the site.

This report was prepared solely for the use of Allan Aircraft Supply Company. The factual data and interpretations pertain to the specific project described in this report and any reliance on this document by any other person or entity shall be at that party's sole risk.

Our investigation was performed using the standard of care and level of skill ordinarily exercised under similar circumstances by reputable Environmental Assessors and Geologists currently practicing in these or similar localities. No other warranty, express or implied, is made as to the conclusions and professional advice included in this report.

Respectfully submitted,

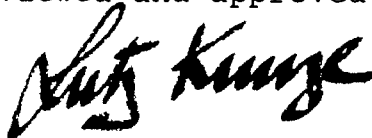
SMITH-EMERY COMPANY



BRIAN PRIMEAU
Environmental Assessor

BP:LK/ss

Reviewed and approved by



LUTZ KUNZE
P.E. C-25801, R.G.E. 493
Registered Geotechnical Engineer
Registered Civil Engineer

REPLACEMENT AND DISPOSAL OF LUBRICANTS AND HYDRAULIC OILS.
PROCEDURE AND CONTAINMENT OF LUBRICANTS AND COOLANTS

SEE SAFETY DATA SHEET FOR PRODUCT INFORMATION AND IDENTIFICATION.

PRESENTLY USED LUBRICANTS / COOLANTS.
SUPPLIED BY: HASCO OIL COMPANY

CLEAREDGE 6519; ANNUAL USAGE 55 CONCENTRATED GALLONS, MIXTURE RATIO: 10:1
YEARS USED: 1980 TO PRESENT

MICROCHIP; ANNUAL USAGE, 25 CONCENTRATED GALLONS, MIXTURE RATIO: 10:1
YEARS USED: 1980 TO PRESENT

PRESENTLY USED HYDRAULIC OILS
SUPPLIED BY: HASCO OIL COMPANY

AW HYDRAULIC OIL ISO VG 150; ANNUAL USAGE: 25 GALLONS, YEARS USED: 2003 TO PRESENT
HYSPIN AWS 32; ANNUAL USAGE 165 GALLONS, YEARS USED: 1982 TO PRESENT
HYSPIN AWS 68; ANNUAL USAGE 110 GALLONS, YEARS USED: 1982 TO PRESENT

Containment and storage of all 55 gallon lubricant and coolant drums shall be at mid the entrance of the material storage warehouse. The drums shall be placed over a protected foundation surface that contains absorb sand underneath which allows lubricant and coolant droplets to be captured and removed and properly disposed into the "Solid Waste" container. The soiled absorb sand shall be evaluated and removed at a minimum of every 6 months. Any spillage outside the foundation will quickly be cleaned up using absorb sand tossed onto the spill and immediately cleaned up. The contaminated sand will be deposited into the "Solid Waste" drum located in the chip yard.

Lubricant / Coolant Replacement and disposal:

1. All new replacement fluid / coolant that is pumped out from the 55 gallon drums shall be filled to 3/4 full of container capacity.
2. All spent used fluid / coolant that is pumped from the machines shall be filled 3/4 full of container capacity. The bucket shall be placed in the bed of the machine and used as a containment for the removal of the spent fluid. A coolant hose is placed into the 5 gallon bucket. The remaining hoses will have the valves closed. The internal pump located within the coolant reservoir will be turned on and allowed to fill the bucket 3/4 of capacity. The bucket will then be closed using the bucket lid, removed from the containment bed and loaded on a cart and disposed into the 500 gallon recyclable container located in the chip yard.
3. Any spillage, despite how small the trace amount shall have absorb sand spread on the spill and immediately cleaned up. The contaminated sand will be deposited into the 10 gallon "Solid Waste" drum located in the chip yard. When the "Solid Waste" drum is 3/4 full, the waste shall be taken to an approved city "Hazardous Waste" round-up site for disposal.
4. All spent used fluid / coolant shall be deposited into the 500 gallon recyclable container located under the protected cover in the chip yard. When the container is full, notify the production manager so that the spent fluids can be properly removed and transported out by the chemical recycle company.

#22-23

SYNTHETIC LUBRICANTS, INC1411 Callaghan Drive
Greenville, MI 48838**MATERIAL SAFETY DATA SHEET**

Date of Preparation: April 12, 2004
Revision Number: 1
Emergency Telephone Number: (616) 754-1050

Product Name

MICROCHIP™

Section I: Ingredients

Name of Ingredient: Proprietary Mixture

It should be noted, none of the constituents of the product are regarded as carcinogenic by any reference cited by OSHA under 29 CFR 1910.1200

Section II: Physical Data

Boiling Point: As Water	Vapor Density: As Water
Specific Gravity: 1. kg/l	Odor: Odorless
Voltiles: Not Determined	Vapor Pressure: As Water
Solubility in Water: Completely Misable	Appearance: Violet-Blue Liquid
Freezing Point: 32 ° Fahrenheit	Evaporation Rate: As Water
pH Level: Slightly alkaline, pH 8.0 to 8.6	

Section III: Fire & Explosion Data

Flash Point: None
Flammable Limits: LFL & UFL Not Determined
Fire Fighting Equip: This water-based product will not burn. It will produce irritating and potentially toxic fumes containing oxides of nitrogen if exposed to extreme heat in air. If fire situation, respiratory protection should be considered.
Method Used: N/A
Extinguishing Media: Water based product

Section IV: Reactivity Data

Stability: (Conditions to Avoid) Stable under normal use conditions and in final use concentration.
Incompatibility: (Materials to Avoid) Product concentrate behaves as an aqueous solution. Product may be degraded by exposure to acid materials. Some components of the product concentrate are reactive with oxidizing or reducing materials but in the diluted working solution, this should not be a problem. Use on Magnesium is not recommended, therefore, Synthetic Lubricants, Inc is not responsible for customers that use this product on Magnesium.
Hazardous Decomposition Products: Under proper use conditions, this product is a very dilute solution of the active ingredients. Extremely small amount of oxides of nitrogen and carbon is released as the product is subjected to combustion situations.
Hazardous Polymerization: Will not occur.

Section V: Environmental & Disposal

Leaks & Spills: Dilute small spills with quantities of water and discard to the sanitary sewer. This product contains trace amount of residual alkanolamines. Large spills, contain with absorbent materials and institute clean-up efforts to recover the spilled liquid outlined in facility control plan.

Disposal Method: Follow all local, State, and Federal regulations.

Section VI: Health Hazard Data

Eyes: While the working solution is very dilute, the mixture may cause irritation to eyes. Eye contact should be avoided.

Skin Contact: Prolonged or repeated exposure to the stock solution may cause mild skin irritation in sensitive skin.

Ingestion: This product should not be taken internally. Provide the victim with large quantities of water and seek medical assistance.

Inhalation: Vapors may be released if stock solution of this product, as supplied, is heated above room temperature. The vapors may be irritating to respiratory passages and should be avoided.

Section VII: First Aid

Eyes: Irrigate with flowing water immediately for at least 15 minutes. Consult medical assistance.

Skin: Wash off stock solution residues with running water. Remove contaminated clothing and wash thoroughly before re-use.

Ingestion: If the victim has ingested the stock solution, administer large amounts of water and consider medical treatment.

Inhalation: If effects occur, remove to fresh air. Consult medical authorities. In vapor situations, use eye protection.

Section VIII: Handling Precautions

Exposure Guideline: OSHA has established an exposure standard for the active alkanolamine salts ingredient in the air which is: Threshold Limit Value (TLV): 3.00ppm

Under normal use conditions, this product is a very dilute aqueous solution which makes it unlikely that any user will experience the concentration level of alkanolamine derivatives approaching this OSHA limit.

Ventilation: General good ventilation should be acceptable for most situations. If vapors are generated in use conditions, local exhaust should be considered.

Respiratory Protection: None should be needed.

Skin Protection: Under normal use none should be needed. However, for sensitive individuals, gloves may be indicated when mixing solution.

Eye Protection: Eye contact with the stock product should be avoided. Wear appropriate eye protection.

Storage: Do not store the stock solution under freezing conditions. Store drums in a dry place in a temperature range of 40 to 100 degrees Fahrenheit.

Section IX: Additional Information

Avoid unnecessary skin and eye contact with stock product, as supplied. Avoid breathing any vapors that are generated by stock product. Do not contaminate food or drink. This product is not thought to be a serious carcinogenic threat. The active ingredient in this product has not been listed by OSHA, ACGIH, National Cancer Institute (NCI), National Toxicology Program (NTC), the Environmental Protection Agency (USEPA) or the International Agency for Research on Cancer (IARC) as a carcinogen. While the concentrated form of the active ingredient in this product is a skin and inhalation irritant, the actual concentration found in the eventual working solution are very dilute reducing the hazard potential of the active alkanolamine ingredients to the level of insignificant.

Section X: Comments

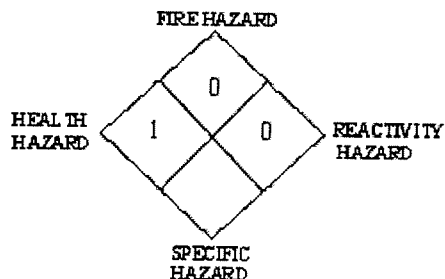
The information in this MSDS was obtained from sources that we believe are reliable. However, this information is provided without any representation or warranty, express or implied, regarding the accuracy or correctness of this information.

The conditions or methods of handling, storage, use and disposal of this product are beyond our control and may be beyond our knowledge. For these and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with the handling, storage, use or disposal of this product once sold and delivered.

HMIS III:

1	HEALTH
0	FLAMMABILITY
0	PHYSICAL HAZARD
C	PROTECTIVE EQUIPMENT

NFPA HAZARD RATINGS:



NFPA 704 ratings are subject to interpretation and are only intended for general identification of the level of the specific hazard. All information must be considered for proper safe handling of the material.

Material Safety Data Sheet



22-23

1. Chemical product and company identification

Product name CLEAREDGE 6519
MSDS # 03047
Code 03047-BE
Product use Lubricant
Manufacturer Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563
Supplier Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563
Product Information: 1-800-621-2661
EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Composition/information on ingredients

Ingredient name	CAS #	% by weight
Distillates (petroleum), hydrotreated, heavy naphthenic (Highly refined mineral oil)	64742-52-5	25 - 30
Highly refined mineral oil (proprietary)	proprietary	1 - 5
2-Cyclohexene-1-octanoic acid, 5(OR 6)-carboxy-4-hexyl-, compd. with 2-amino-2-methyl-1-propanol	68128-58-5	1 - 5
glycine, n-methyl-n-(1-oxo-9-octadecenyl)-, (z)-, compd. with 2-amino-2-methyl-1-propanol (1:1)	68140-40-9	1 - 5
Triethanolamine	102-71-6	1 - 5
alcohols, C16-18 and C18-unsatd., ethoxylated	68920-66-1	5 - 10
3-Iodo-2-propynyl butylcarbamate	55406-53-6	0.1 - 1

3. Hazards identification

Physical state Liquid.

Color Yellow. to Amber. (Light.)

Emergency overview WARNING!
CAUSES EYE IRRITATION.
CAUSES SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
Do not ingest. Avoid contact with skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry Dermal contact. Eye contact. Inhalation. Ingestion.

Potential health effects

Eyes	Causes eye irritation.
Skin	Causes skin irritation.
Inhalation	May cause respiratory tract irritation.

Product name CLEAREDGE 6519

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Version 4

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Format US

Language ENGLISH.

Build 4.2.6

(ENGLISH)

Ingestion	Ingestion may cause gastrointestinal irritation and diarrhea.
Medical conditions aggravated by over-exposure	None identified.
See toxicological information (section 11)	

4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation develops.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

5. Fire-fighting measures

Flammability of the product	May be combustible at high temperature.
Products of combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ etc.), sulfur oxides (SO ₂ , SO ₃ etc.). Some metallic oxides.
Unusual fire/explosion hazards	This material is not explosive as defined by established regulatory criteria.
Fire-fighting media and instructions	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Do not ingest. Avoid contact with skin and clothing. Avoid contact with eyes. Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Wash thoroughly after handling. DO NOT ADD NITRITES TO THIS FLUID.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

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		Build 4.2.6		

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Occupational exposure limits

Distillates (petroleum), hydrotreated, heavy naphthenic (Highly refined mineral oil)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Highly refined mineral oil (proprietary)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

2-Cyclohexene-1-octanoic acid, 5(OR 6)-carboxy-4-hexyl-, compd. with 2-amino-2-methyl-1-propanol glycine, n-methyl-n-(1-oxo-9-octadecenyl)-, (z)-, compd. with 2-amino-2-methyl-1-propanol (1:1)
Triethanolamine

None assigned.

None assigned.

ACGIH TLV (United States, 1/2005).

TWA: 5 mg/m³ 8 hour(s).

alcohols, C16-18 and C18-unsatd., ethoxylated
3-Iodo-2-propynyl butylcarbamate

None assigned.

None assigned.

Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protection

Eyes

Avoid contact with eyes. Safety glasses with side shields.

Skin and body

Avoid contact with skin and clothing. Wear suitable protective clothing.

Respiratory

Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Hands

Wear suitable gloves.

Not available.



Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state

Liquid.

pH

9.4 (Basic.) at 5%

Odor

Slight.

Color

Yellow. to Amber. (Light.)

Heat of combustion

Not available.

Density

996 kg/m³ (0.996 g/cm³) at 15.6°C

Solubility

Easily soluble in cold water, hot water.

Product name
CLEAREGE 6519

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(ENGLISH)

Dispersibility properties Easily dispersed in hot water.

10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	Not available.
Incompatibility with various substances	Not available.
Hazardous decomposition products	Not available.
Hazardous polymerization	Will not occur.

11. Toxicological information

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
-----------------------------	--

Mutagenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
--------------------------	---

Reproductive effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.
-----------------------------	--

Teratogenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.
----------------------------	--

Other chronic toxicity data	Alkanolamine: This product contains an alkanolamine. In all metalworking fluids containing amines, there is a potential for forming nitrosamines which are animal carcinogens. Therefore, no nitrites or related nitrosating agents should be added to such compositions. Based on animal studies May cause damage to the following organs: kidneys
------------------------------------	---

12. Ecological information

Ecotoxicity	No testing has been performed by the manufacturer.
-------------	--

13. Disposal considerations

Waste information	Dispose of according to all federal, state and local applicable regulations.
-------------------	--

Consult your local or regional authorities.

14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

15. Regulatory information

U.S. Federal regulations	US INVENTORY (TSCA): In compliance.
--------------------------	-------------------------------------

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: CLEAREDGE 6519: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

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			Build 4.2.6	Language	ENGLISH.
					(ENGLISH)

SARA 313**Form R - Reporting requirements**

This product does not contain any hazardous ingredients at or above regulated thresholds.

Supplier notification

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4): This material is not regulated under CERCLA Sections 103 and 107.

State regulations

Florida: triethanolamine
Massachusetts RTK: triethanolamine
Minnesota: triethanolamine
Pennsylvania RTK: triethanolamine (generic environmental hazard)
California Prop 65: No products were found

Inventories

AUSTRALIAN INVENTORY (AICS): Not determined.
CANADA INVENTORY (DSL): In compliance.
CHINA INVENTORY (IECS): Not determined.
EC INVENTORY (EINECS/ELINCS): Not determined.
JAPAN INVENTORY (ENCS): Not determined.
KOREA INVENTORY (ECL): Not determined.
PHILIPPINE INVENTORY (PICCS): Not listed.

16. Other information**Label requirements**

WARNING!
CAUSES EYE IRRITATION.
CAUSES SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

HMIS® Rating :

Health	2	*	National Fire Protection Association (U.S.A.)
Flammability	1		
Physical Hazard	0		
Personal protection	B		

**Other special considerations**

PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200.

History**Date of issue**

02/01/2006.

Date of previous issue

12/13/2005.

Prepared by

Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP

Product name CLEAREDGE 6519

MSDS #

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(ENGLISH)

Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

Product name CLEAREGE 6519

MSDS # 03047-BE

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Version 4 **Date of issue** 02/01/2006.

Format US

Language ENGLISH.

Build 4.2.6

(ENGLISH)

Material Safety Data Sheet

#22-23



1. Chemical product and company identification

Product name HYSPIN AWS 68
MSDS # 12081
Code 12081-AE
Product use Lubricant
Manufacturer Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563
Supplier Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563
Product Information: 1-800-621-2661
EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Composition/information on ingredients

Ingredient name	CAS #	% by weight
Distillates (petroleum), solvent-refined heavy paraffinic (Highly refined mineral oil)	64741-88-4	95 - 100

3. Hazards identification

Physical state Liquid.
Color Clear. Yellow.
Emergency overview CAUTION!
MAY CAUSE EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
Avoid prolonged or repeated contact with skin. Keep container closed. Wash thoroughly after handling. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Use with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.
Routes of entry Dermal contact. Eye contact. Inhalation. Ingestion.
Potential health effects
Eyes May cause eye irritation.
Skin May cause skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation May cause respiratory tract irritation.
Ingestion Ingestion may cause gastrointestinal irritation and diarrhea.
Medical conditions aggravated by over-exposure None identified.
See toxicological information (section 11)

Product name HYSPIN AWS 68

MSDS #

12081-AE

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4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

5. Fire-fighting measures

Flammability of the product	May be combustible at high temperature.
Flash point	226 °C (Open cup) Cleveland.
Products of combustion	These products are carbon oxides (CO, CO ₂).
Unusual fire/explosion hazards	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts and oxidizing materials.
Fire-fighting media and instructions	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Occupational exposure limits
-----------------	------------------------------

Product name HYSPIN AWS 68		MSDS # 12081-AE	Page: 2/5
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Distillates (petroleum), solvent-refined heavy paraffinic (Highly refined mineral oil)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Control Measures

No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure below any recommended or statutory limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the work-station location.

Personal protection

Eyes

Avoid contact with eyes. Safety glasses with side shield or chemical goggles.

Skin and body

Avoid prolonged or repeated contact with skin. Wear suitable protective clothing.

Respiratory

Use only with adequate ventilation.

Hands

Wear suitable gloves.

Not available.



Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state	Liquid.
Odor	Oily
Color	Clear. Yellow.
Heat of combustion	Not available.
Density	890 kg/m ³ (0.89 g/cm ³) at 15.6°C
Solubility	Insoluble in cold water.
Viscosity	Kinematic: 28.8 to 35.2 mm ² /s (28.8 to 35.2 cSt) at 40°C

10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	None known.
Incompatibility with various substances	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Carbon Dioxide (CO ₂). nitrogen oxides (NO, NO ₂ ...)
Hazardous polymerization	Will not occur.

Product name HYSPIN AWS 68

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11. Toxicological information

Chronic toxicity

Carcinogenic effects

No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).

Mutagenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.

Reproductive effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

Teratogenic effects

No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

12. Ecological information

Ecotoxicity

No testing has been performed by the manufacturer.

13. Disposal considerations

Waste information

Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities.

RCRA Waste Code(s)

USED OIL

Consult your local or regional authorities.

14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

15. Regulatory information

U.S. Federal regulations

US INVENTORY (TSCA): In compliance.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: HYPIN AWS 68: Immediate (Acute) Health Hazard

SARA 313

Form R - Reporting requirements

This product does not contain any hazardous ingredients at or above regulated thresholds.

Supplier notification

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4): This material is not regulated under CERCLA Sections 103 and 107.

State regulations

No products were found.

Product name HYSPIN AWS 68

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(ENGLISH)

WARNING: This product contains a chemical known to the State of California to cause cancer.
Ethyl acrylate; 1,4-dioxane

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.
Ethylene oxide

Inventories

AUSTRALIAN INVENTORY (AICS): In compliance.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): Not determined.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): Not determined.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): In compliance.

16. Other information

Label requirements

CAUTION!

MAY CAUSE EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

HMIS® Rating :

Health	1	-	National Fire
Flammability	1		Protection
Physical	0		Association
Hazard			(U.S.A.)
Personal	B		
protection			



Other special considerations

PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200. No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA.

History

Date of issue 05/31/2005.

Date of previous issue 05/17/2004.

Prepared by Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

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Material Safety Data Sheet



#22-25

1. Chemical product and company identification

Product name HYSPIN AWS 32
MSDS # 12079-AK
Code 12079-AK
Product use Lubricant
Manufacturer Castrol Canada, Inc.
3660 Lakeshore Blvd. West
Toronto, Ontario M8W 1P2
CANADA
Product Information: 416-252-5511
Supplier Castrol Industrial North America, Inc.
150 W. Warrenville Road
Naperville, IL 60563
Product Information: 1-800-621-2661
EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Composition/information on ingredients

Ingredient name	CAS #	% by weight
Distillates (petroleum), hydrotreated, heavy paraffinic (Highly refined mineral oil)	64742-54-7	45 - 50
Distillates (petroleum), solvent-dewaxed heavy paraffinic (Highly refined mineral oil)	64742-65-0	45 - 50
Distillates (petroleum), solvent-refined heavy paraffinic (Highly refined mineral oil)	64741-88-4	1 - 5

3. Hazards identification

Physical state Liquid.
Color Clear. Yellow.
Emergency overview CAUTION!
MAY CAUSE EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.
Avoid prolonged or repeated contact with skin. Keep container closed. Wash thoroughly after handling. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Use with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.
Routes of entry Dermal contact. Eye contact. Inhalation. Ingestion.
Potential health effects
Eyes May cause eye irritation.
Skin May cause skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Inhalation May cause respiratory tract irritation.

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Ingestion	Ingestion may cause gastrointestinal irritation and diarrhea.
Medical conditions aggravated by over-exposure	None identified.
See toxicological information (section 11)	

4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

5. Fire-fighting measures

Flammability of the product	May be combustible at high temperature.
Flash point	200 °C (Open cup) Cleveland.
Products of combustion	These products are carbon oxides (CO, CO ₂).
Unusual fire/explosion hazards	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts and oxidizing materials.
Fire-fighting media and instructions	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

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8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Occupational exposure limits

Distillates (petroleum), hydrotreated, heavy paraffinic (Highly refined mineral oil)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Distillates (petroleum), solvent-dewaxed heavy paraffinic (Highly refined mineral oil)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Distillates (petroleum), solvent-refined heavy paraffinic (Highly refined mineral oil)

ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Mist

STEL: 10 mg/m³ 15 minute(s). Form: Mist

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Mist

Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Hygiene measures

Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Personal protection

Eyes

Avoid contact with eyes. Safety glasses with side shield or chemical goggles.

Skin and body

Avoid prolonged or repeated contact with skin. Wear suitable protective clothing.

Respiratory

Use only with adequate ventilation.

Hands

Wear suitable gloves.

Not available.



Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state

Liquid.

Odor

Oily

Color

Clear. Yellow.

Density

871.7 kg/m³ (0.872 g/cm³) at 15°C

Solubility

Insoluble in cold water.

Viscosity

Kinematic: 30 to 34 mm²/s (30 to 34 cSt) at 40°C

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10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	None known.
Incompatibility with various substances	Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	Carbon Dioxide (CO ₂), nitrogen oxides (NO, NO ₂ ...)
Hazardous polymerization	Will not occur.

11. Toxicological information

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
Mutagenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
Reproductive effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.
Teratogenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.

12. Ecological information

Ecotoxicity	No testing has been performed by the manufacturer.
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13. Disposal considerations

Waste information	Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities.
RCRA Waste Code(s)	USED OIL
Consult your local or regional authorities.	

14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

15. Regulatory information

U.S. Federal regulations	US INVENTORY (TSCA): In compliance. This product is not regulated under Section 302 of SARA and 40 CFR Part 355. SARA 311/312 MSDS distribution - chemical inventory - hazard identification: HYPIN AWS 32: Immediate (Acute) Health Hazard
SARA 313	

Product name	HYSPIN AWS 32	MSDS #	12079-AK	Page: 4/6
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Form R - Reporting requirements**Supplier notification**

This product does not contain any hazardous ingredients at or above regulated thresholds.

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.

State regulations

No products were found.

WARNING: This product contains a chemical known to the State of California to cause cancer. Ethyl acrylate; Arsenic

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Benzene; Cadmium; Lead

Inventories

AUSTRALIAN INVENTORY (AICS): In compliance.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): In compliance.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): In compliance.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): In compliance.

16. Other information**Label requirements**

CAUTION!

MAY CAUSE EYE IRRITATION.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

HMIS® Rating :

Health	1	-	National Fire
Flammability	1		Protection
Physical	0		Association
Hazard			(U.S.A.)
Personal	B		
protection			

**Other special considerations**

PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200.

History**Date of issue**

07/14/2005.

Date of previous issue

07/28/2004.

Prepared by

Product Stewardship

Notice to reader

Product name HYPIN AWS 32

MSDS #

12079-AK

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Version 2

Date of issue 07/14/2005.

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(ENGLISH)

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

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		Build 4.2.4	(ENGLISH)	

Material Safety Data Sheet**CODE: 33023**

Revised: 03/26/02

SECTION 1**CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

LUBRICATING SPECIALTIES COMPANY
8015 PARAMOUNT BLVD.
PICO RIVERA, CA 90660

PHONE NUMBERS:

Business hours: (562) 776-4000
24 hours: Chemtrec: (800) 424-9300
General MSDS: (562) 776-4000

Product Name: **AW Hydraulic Oil ISO VG 150**
Chemical Name: Oil, n.o.s.
Common Name: Petroleum Oil

CAS #: Mixture

SECTION 2**COMPOSITION/INFORMATION ON INGREDIENTS**

COMMON NAME	CHEMICAL NAME	CAS NO.	%
Hydrotreated heavy paraffinic distillate		64742-54-7	<70
Hydrotreated residual oil		64742-57-0	<40
Zinc compounds		68649-42-3	<1

Contains zinc salt of dialkyl dithiophosphoric acid judged not to affect the potential health and environmental impact of the product.

Contains no other ingredients now known to be hazardous as defined by OSHA 29 CFR 1910.1000(z).

SECTION 3**HAZARD IDENTIFICATION****Principle Hazards:**

Prolonged or repeated skin contact may cause dermatitis.
See section 11 for complete health hazard information.

Threshold Limits:

The PEL (OSHA) and the TLV (ACGIH) is 5 mg/m³ for oil mists.

Primary Routes of Exposure:**EYE**

May cause eye irritation if splashed into eyes.

SKIN

Repeated or prolonged contact with skin may cause irritation which may lead to various skin disorders. Avoid prolonged skin contact.

INHALATION

Inhalation of vapor or oil mist from this product may cause mild irritation of the respiratory system. Use in well ventilated areas.

ORAL

Ingestion may cause nausea, diarrhea and stomach discomfort.

SECTION 4**FIRST AID MEASURES****ORAL**

DO NOT INDUCE VOMITING. If conscious, give 2 glasses of water. Get immediate medical attention.

EYE

Flush with water at least 15 minutes. Get medical attention if eye irritation develops or persists.

SKIN

Wash immediately with soap and water. Remove soiled clothing. Get medical attention if irritation develops. Launder contaminated clothing.

INHALATION

Remove exposed person to fresh air. If breathing is labored, administer oxygen and obtain immediate medical attention. If irritation persists or if toxic symptoms are observed, get medical attention.

Material Safety Data Sheet**CODE: 33023****Revised: 03/26/02****SECTION 5****FIRE FIGHTING MEASURES****FLASH POINT:** >225° C (COC) >437° F

May release flammable vapors when heated above flash point.

EXTINGUISHING MEDIA Carbon Dioxide, dry chemical, or foam. Avoid using water.**HAZARDOUS EXPOSURE** Carbon monoxide and asphyxiants.**SPECIAL FIRE PROCEDURES** Recommend SCBA. Use water only for cooling container. Water may cause splattering, or transport the flame.**SECTION 6****ACCIDENTAL RELEASE MEASURES**

Evacuate all non-essential personnel. Personal Protective Equipment must be worn, see PPE section 8 & 16. Remove sources of ignition. Prevent entry into sewers and waterways. Contain release, pick up free liquid for recycling or disposal. Residual liquid can be absorbed with inert material. Check DOT/CERCLA and other agencies for reporting requirements.

Prevent contamination to soil, waterway and sewer systems.

SECTION 7**HANDLING AND STORAGE**

HANDLING Avoid prolonged skin contact, breathing vapors, and contaminated clothing. Use with adequate ventilation. Wear recommended protective equipment. Practice good personal hygiene after handling.
Empty containers retain material residue. Do not cut, weld, braze, solder or expose containers to other ignition sources.

STORAGE Store in closed containers of proper construction. Store away from ignition sources and in areas of good ventilation.

SECTION 8**EXPOSURE CONTROLS - PERSONAL PROTECTION**

EXPOSURE LIMITS TLV = 5 mg/m³ as oil mist

VENTILATION Use in areas of adequate ventilation. Use mechanical exhaust to control vapors or mists.

GLOVES Use nitrile or neoprene gloves are recommended.

EYE PROTECTION Safety glasses, goggles, or face shield are recommended.

RESPIRATORY Use NIOSH/MSHA approved respirator with organic vapor cartridge and dust/mist cartridge is recommended exposure limit is exceeded. Self-contained breathing apparatus is recommended for confined space entry.

CLOTHING Long sleeve shirt and apron when potential for skin contact. Wear neoprene or nitrile rubber boots when necessary to avoid contaminating shoes.

SECTION 9**PHYSICAL AND CHEMICAL PROPERTIES**

Material Safety Data Sheet**CODE: 33023**

Revised: 03/26/02

APPEARANCE:	amber oily liquid	Ph:	n/d
BOILING POINT:	>325° C	SOLUBILITY:	negligible
EVAPORATION POINT:	less than ether	SPECIFIC GRAVITY:	0.8780
FLAMMABILITY:	N/A	VAPOR DENSITY:	heavier than air
FLASH POINT:	>225° C	VAPOR PRESSURE:	<0.01mm Hg @ 20° C
ODOR:	petroleum	VOC, %:	nil

SECTION 10 STABILITY AND REACTIVITY

STABILITY	Material is normally stable at ambient temperature and pressure.
CONDITIONS TO AVOID	Oxidizing agents. Do not heat above the flash point.
POLYMERIZATION	Will not occur.
DECOMPOSITION	Carbon dioxide, carbon monoxide.

SECTION 11 TOXICOLOGICAL INFORMATION

ORAL TOXICITY	Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.
EYE IRRITATION	Not expected to cause eye irritation.
SKIN IRRITATION	Not expected to be a primary skin irritant. Prolonged or repetitive contact may cause irritation.
CARCINOGENIC	This material has not been identified as a carcinogen by NTP, IARC, or OSHA.

SECTION 12 ECOLOGICAL INFORMATION

This material is expected to have adverse affects on marine and plant life. Spills may contaminate drinking water.

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL	Consult federal, state, and local regulations regarding disposal methods. Recycle used oil. Do not contaminate used oil with solvents or other chemicals.
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SECTION 14 TRANSPORTATION INFORMATION

See 49 CFR part 171.8 through 178.510
DOT SHIPPING NAME: Oil, n.o.s.
DOT HAZARD CLASS: Not Regulated
UN/NA NUMBER:
GUIDE NUMBER: 27
IMDG CODE:

Materials classified as DOT Combustible Liquids (Flash Point > 141° F and < 200° F) are not regulated by DOT in containers of 110 gallons, or less for domestic shipments.

SECTION 15 REGULATORY INFORMATION

TSCA
SARA 311
SARA 312

All components of this material are on the US TSCA inventory.

Material Safety Data Sheet**CODE: 33023****Revised: 03/26/02**SARA 313
CAL PROP 65
RCRA
CERCLAcontains < 1% zinc compounds
not listed
not listed
listed**SECTION 16 OTHER INFORMATION**

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>PPE</u>
HMIS CODE:	1	1	0	C
NFPA CODE:	1	1	0	

PRECAUTIONARY LABELS: NA

This information has been compiled from sources considered to be dependable and is accurate to the best of Lubricating Specialties Company knowledge. Lubricating Specialties Company makes no warranty whatsoever, expressed or implied, of MERCHANTABILITY OR FITNESS FOR THE PARTICULAR PURPOSE, regarding the accuracy of such data or the results to be obtained from the use thereof. Lubricating Specialties Company assumes no responsibility for injury to recipient or third persons, or for any damage to any property and recipient assumes all such risks.

Prepared by: Greg Hovanesian
Safety ManagerApproved by: Mark Negast
Vice-President, Technical Services/R&D

REPLACEMENT AND DISPOSAL OF 1-1-1 TRICHLOROETHANE CLEANER**YEARS USED: 1970 - 1982**

SERVICED AND SUPPLIED BY: Oil & Solvent Process Company

PRODUCT NAME: 1-1-1 Trichloroethane, Trichlorethylene

Location: Storage tank was located **outside** the north wall of building (1) positioned approx. 10ft above the ground.
Solution was gravity fed into building (1) on request via on/off gate valve.
Part washer tank was located inside building (1) against the north wall.

Capacity: Storage Tank; 350 gallons
Part Washer Unit; 300 gallon
Annual Usage: 500 / 600 gallons

1. Trichloroethane was trucked onto the facility by the Oil & Solvent Process Co and pumped new solution into the storage tank.
2. Spent Solution was funneled into 55 gallon drums and tightly sealed for pick-up by Oil & Solvent Process Co.
3. Clean empty 55 gallon drums were supplied by Oil & Solvent Process Co. for storage of spent Trichloroethane.
4. The location of the spent solution drums was adjacent to the part washer.

Replacement and disposal of Trichloroethane / Trichoroethylene

1. New Trichloroethane was available by placing a 5 gallon bucket under the flow line of the storage tank and opening the gate valve and filling the bucket 3/4 full of capacity. The bucket was then carefully walked-up a 2 step platform of the part washer and then poured into the part washer tank. This process was repeated until the desired solution level was obtained.
2. Spent solution was removed from the part washer tank by scooping a 5 gallon bucket 3/4 full and then carefully funneled into 55 gallon drums that were provided by the Oil & Solvent Company. The drums were tightly closed with a self sealing cap.
3. The Oil & Solvent Process Co hand trucked the 55 gallon drums of spent solution on to their truck and transported the solution out of the facility.
4. No spillage or leakage was noted. Absorb sand was always present in case containment of spilled solution needed to be contained and cleaned-up

M A T E R I A L S A F E T Y D A T A S H E E T

PPG INDUSTRIES INC.
CHEMICALS GROUP
ONE GATEWAY CENTER
PITTSBURGH, PA 15222

24-HOUR EMERGENCY ASSISTANCE:
(304)843-1300

DATE: MAY 10, 1995

EDITION: FIVE

PRODUCT CODE: BC 0330

DISTRIBUTED BY: HUBBARD-HALL INC.
563 SOUTH LEONARD STREET
WATERBURY, CT 06708

TRADE NAME AND SYNONYMS: HUB-THANE
CHEMICAL NAME AND SYNONYMS: 1,1,1-TRICHLOROETHANE;
METHYLCHLOROFORM, TRI-ETHANE(R) 377 CAS NO.: 71-55-6
CHEMICAL FAMILY: HALOGENATED HYDROCARBONS
FORMULA: CH3CCL3
DOT SHIPPING NAME: 1,1,1-TRICHLOROETHANE
DOT HAZARD CLASS: 6.1 (HARMFUL - STOW AWAY FROM FOODSTUFFS)
SUBSIDIARY RISK: N/A
I.D. NUMBER: UN2831
PACKING GROUP: III
REPORTABLE QUANTITY: 1000 LBS/454 KG
MARINE POLLUTANT

*STABILIZED FOR VAPOR DEGREASING AND GENERAL SOLVENT USE.

NFPA DESIGNATION 704

HAZARD-RATING:	FIRE: 1
4 - EXTREME	
3 - HIGH	HEALTH: 2 0 REACTIVITY
2 - MODERATE	
1 - SLIGHT	0 SPECIFIC

SECTION 1 - PHYSICAL DATA

BOILING POINT @ 760 MM HG: 72-88 C
VAPOR DENSITY (AIR=1): 4.54
SPECIFIC GRAVITY (H2O=1): 1.300-1.32 @ 25/25C
PH OF SOLUTIONS: 6.0 TO 7.5
FREEZING/MELTING POINT: -45C
SOLUBILITY (WEIGHT % IN WATER): NEGLIGIBLE
BULK DENSITY: 10.8-10.97 LBS/GAL @ 25C
VOLUME % VOLATILE: 100
VAPOR PRESSURE: 135 MM HG @ 25C
EVAPORATION RATE: (ETHYL ETHER =1): 0.35
HEAT OF SOLUTION: NOT APPLICABLE
APPEARANCE AND ODOR: CLEAR, COLORLESS LIQUID - ETHER-LIKE ODOR

BC 0330

HUB-THANE

CONTINUED

SECTION II * INGREDIENTS

MATERIAL	PERCENT
1,1,1 - TRICHLOROETHANE (STABILIZED)	> 95%
GLYCOL METHYLENE ETHER (CAS 646-06-0), SEC	BALANCE
BUTANOL <2% (CAS 78-92-2)	
OTHER STABILIZERS	

SECTION III - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT F (METHOD USED): NONE (BY DOT TEST METHOD)
FLAMMABLE LIMITS IN AIR (% BY VOLUME): LEL: 7% UEL: 15%
EXTINGUISHING MEDIA: WATER, DRY CHEMICAL OR CARBON DIOXIDE.
SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR A NIOSH/MSHA-APPROVED PRESSURE-DEMAND, SELF-CONTAINED BREATHING APPARATUS FOR POSSIBLE EXPOSURE TO HYDROGEN CHLORIDE AND POSSIBLY TRACES OF PHOSGENE.
UNUSUAL FIRE AND EXPLOSION HAZARDS: VAPORS CONCENTRATED IN A CONFINED OR POORLY VENTILATED AREA CAN BE IGNITED UPON CONTACT WITH A HIGH ENERGY SPARK, FLAME OR HIGH INTENSITY SOURCE OF HEAT. THIS CAN OCCUR AT CONCENTRATIONS RANGING BETWEEN 7-15% BY VOLUME. DECOMPOSITION OR BURNING CAN PRODUCE HYDROGEN CHLORIDE OR POSSIBLY TRACES OF PHOSGENE.

SECTION IV - HEALTH HAZARD DATA

TOXICITY DATA :
LC 50 INHALATION: (RAT) 14,250 PPM/7 HOURS
LD 50 DERMAL: (RABBIT) > 15G/KG
SKIN/EYE IRRITATION: SEE SECTION V
LD 50 INGESTION: RAT: 10-12 G/KG
FISH, LC 50 (LETHAL CONCENTRATION): UNKNOWN

CLASSIFICATION
INHALATION: SLIGHTLY TOXIC
SKIN/EYE: IRRITATING
SKIN: NOT SIGNIFICANTLY TOXIC
INGESTION: NOT SIGNIFICANTLY TOXIC
AQUATIC: UNKNOWN

SECTION V - EFFECTS OF OVEREXPOSURE

IS CHEMICAL LISTED AS A CARCINOGEN OR POTENTIAL CARCINOGEN?
 NTP: NO IARC: NO OSHA: NO
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
 NONE KNOWN
PERMISSIBLE EXPOSURE LIMITS:
 OSHA: 350 PPM, 8-HOUR TWA (TIME-WEIGHTED AVERAGE);
 450 PPM, STEL (15-MINUTE SHORT TERM EXPOSURE LIMIT);
 29 CFR 1910.1000 (REV. 3/1/89)

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HUB-THANE

CONTINUED

ACUTE

INHALATION: HUB-THANE CS IS PRIMARILY A CENTRAL NERVOUS SYSTEM DEPRESSANT. INHALATION CAN CAUSE IRRITATION OF THE RESPIRATORY SYSTEM, DIZZINESS, NAUSEA, LIGHTHEADEDNESS, HEADACHE, LOSS OF COORDINATION AND EQUILIBRIUM, UNCONSCIOUSNESS, POSSIBLE CENTRAL NERVOUS SYSTEM DAMAGE AND EVEN DEATH IN CONFINED OR POORLY VENTILATED AREAS. FATALITIES FOLLOWING SEVERE ACUTE EXPOSURE TO VARIOUS CHLORINATED SOLVENTS HAVE BEEN ATTRIBUTED TO VENTRICULAR FIBRILLATION.

AEROSOL: PRELIMINARY RESULTS FROM STUDIES IN RATS INDICATE THAT THE ACUTE INHALATION TOXICITY OF "AEROSOLIZED" 1,1,1-TRICHLOROETHANE IS HIGHER THAN EXPECTED BASED ON THE REPORTED ACUTE INHALATION TOXICITY OF 1,1,1-TRICHLOROETHANE VAPOR. THE SIGNIFICANCE OF THESE FINDINGS TO HUMAN HEALTH IN PRODUCT USE SITUATIONS IS NOT CLEARLY UNDERSTOOD.

EYE/SKIN: LIQUID SPLASHED IN THE EYE CAN RESULT IN DISCOMFORT, PAIN AND IRRITATION. PROLONGED OR REPEATED CONTACT WITH LIQUID ON THE SKIN CAN CAUSE IRRITATION AND DERMATITIS. THE PROBLEM MAY BE ACCENTUATED BY LIQUID BECOMING TRAPPED AGAINST THE SKIN BY CONTAMINATED CLOTHING AND SHOES, AND SKIN ABSORPTION CAN OCCUR.

INGESTION: SWALLOWING OF THIS MATERIAL MAY RESULT IN IRRITATION OF THE MOUTH AND GI TRACT WITH OTHER EFFECTS AS LISTED ABOVE FOR INHALATION. VOMITING AND SUBSEQUENT ASPIRATION INTO THE LUNGS MAY LEAD TO CHEMICAL PNEUMONIA AND PULMONARY EDEMA WHICH IS A POTENTIALLY FATAL CONDITION. LD50 INGESTION (RABBIT; GUINEA PIG) 5.6-9.5 G/KG.

CHRONIC:

HUB-THANE CS HAS BEEN EXTENSIVELY STUDIED FOR CANCER POTENTIAL. THERE IS NO DOCUMENTED EVIDENCE TO SUGGEST THAT HUB-THANE CS CAUSES AN INCREASED CANCER INCIDENCE IN HUMANS OR ANIMALS. THE EPA'S SCIENCE ADVISORY BOARD CONCLUDED THAT THERE IS NO EVIDENCE TO SUGGEST CARCINOGENIC ACTIVITY FOR HUB-THANE CS.

REPRODUCTIVE:

IN DEVELOPMENTAL TOXICITY STUDIES, THERE WAS NO EVIDENCE FOR BIRTH DEFECTS IN RATS OR RABBITS AFTER INHALATION EXPOSURE TO PREGNANT ANIMALS. NO ADVERSE FINDINGS RELATIVE TO REPRODUCTION OR DEVELOPMENTAL TOXICITY WERE OBSERVED FOLLOWING DAILY SIX-HOUR EXPOSURE AT OR BELOW 3000 PPM IN RATS OR RABBITS.

EMERGENCY AND FIRST AID PROCEDURES:

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN.

EYE OR SKIN CONTACT: FLUSH EYES AND SKIN WITH PLENTY OF WATER (SOAP AND WATER FOR SKIN) FOR AT LEAST 15 MINUTES, WHILE REMOVING

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HUB-THANE

CONTINUED

CONTAMINATED CLOTHING AND SHOES. IF IRRITATION OCCURS, CONSULT A PHYSICIAN. THOROUGHLY CLEAN CONTAMINATED CLOTHING AND SHOES BEFORE REUSE OR DISCARD.

INGESTION: IF CONSCIOUS, DRINK LARGE QUANTITIES OF WATER. **DO NOT** INDUCE VOMITING. TAKE IMMEDIATELY TO A HOSPITAL OR PHYSICIAN. IF UNCONSCIOUS, OR IN CONVULSIONS, TAKE IMMEDIATELY TO A HOSPITAL. **DO NOT** ATTEMPT TO INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

NOTES TO PHYSICIAN (INCLUDING ANTIDOTES): ONLY ADMINISTER ADRENALIN AFTER CAREFUL CONSIDERATION FOLLOWING HUB-THANE CS OVEREXPOSURE. INCREASED SENSITIVITY OF THE HEART TO ADRENALIN MAY BE CAUSED BY OVEREXPOSURE TO HUB-THANE CS.

SECTION VI - REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: AVOID OPEN FLAMES, HOT GLOWING SURFACES OR ELECTRIC ARCS.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NONE

INCOMPATIBILITY (MATERIALS TO AVOID): AVOID MIXING WITH CAUSTIC SODA, CAUSTIC POTASH OR OXIDIZING MATERIALS. SHOCK SENSITIVE COMPOUNDS MAY BE FORMED.

HAZARDOUS DECOMPOSITION PRODUCTS: HYDROGEN CHLORIDE AND POSSIBLY TRACES OF PHOSGENE.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED: IMMEDIATELY EVACUATE THE AREA AND PROVIDE MAXIMUM VENTILATION. UNPROTECTED PERSONNEL SHOULD MOVE UPWIND OF SPILL. ONLY PERSONNEL EQUIPPED WITH PROPER RESPIRATORY AND SKIN/EYE PROTECTION (SEE SECTION 8) SHOULD BE PERMITTED IN AREA. DIKE AREA TO CONTAIN SPILL. TAKE PRECAUTIONS AS NECESSARY TO PREVENT CONTAMINATION OF GROUND AND SURFACE WATERS. RECOVER OR ABSORB SPILLED MATERIAL ON SAWDUST OR VERMICULITE AND SWEEP INTO CLOSED CONTAINERS FOR DISPOSAL. AFTER ALL VISIBLE TRACES, INCLUDING IGNITABLE VAPORS, HAVE BEEN REMOVED, THOROUGHLY WET VACUUM THE AREA. **DO NOT** FLUSH TO SEWER. IF AREA OF SPILL IS POROUS, REMOVE AS MUCH CONTAMINATED EARTH AND GRAVEL, ETC., AS NECESSARY AND PLACE IN CLOSED CONTAINERS FOR DISPOSAL.

WASTE DISPOSAL METHOD: CONTAMINATED SAWDUST, VERMICULITE OR POROUS SURFACE MUST BE DISPOSED OF IN A PERMITTED HAZARDOUS WASTE MANAGEMENT FACILITY. RECOVERED LIQUIDS MAY BE REPROCESSED OR INCINERATED OR MUST BE TREATED IN A PERMITTED HAZARDOUS WASTE MANAGEMENT FACILITY. CARE MUST BE TAKEN WHEN USING OR DISPOSING OF CHEMICAL MATERIALS AND/OR THEIR CONTAINERS TO PREVENT ENVIRONMENTAL CONTAMINATION. IT IS YOUR DUTY TO DISPOSE OF THE CHEMICAL MATERIALS AND/OR THEIR CONTAINERS IN ACCORDANCE WITH THE CLEAN AIR ACT, THE CLEAN WATER ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AS WELL AS ANY OTHER RELEVANT STATE OR LOCAL LAWS/ REGULATIONS

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HUB-THANE

CONTINUED

REGARDING DISPOSAL.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: USE A HALF OR FULL FACEPIECE ORGANIC VAPOR CHEMICAL CARTRIDGE OR CANISTER RESPIRATOR WHEN CONCENTRATIONS EXCEED PERMISSIBLE LIMITS. USE SELF-CONTAINED BREATHING APPARATUS (SCBA) OR FULL FACEPIECE AIRLINE RESPIRATOR WITH AUXILIARY SCBA OPERATED IN THE PRESSURE-DEMAND MODE FOR EMERGENCIES AND FOR ALL WORK PERFORMED IN STORAGE VESSELS, POORLY VENTILATED ROOM, AND OTHER CONFINED AREAS. RESPIRATORS MUST BE APPROVED BY NIOSH OR MSHA. THE RESPIRATOR USE LIMITATIONS MADE BY NIOSH/MSHA AND BY THE MANUFACTURER MUST BE OBSERVED. RESPIRATORY PROTECTION PROGRAM MUST BE IN ACCORDANCE WITH 29 CFR 1910.134.

VENTILATION (TYPE): USE LOCAL EXHAUST OR DILUTION VENTILATION AS APPROPRIATE TO CONTROL EXPOSURES TO BELOW PERMISSIBLE LIMITS.

EYE PROTECTION: SPLASHPROOF GOGGLES

GLOVES: VITON(R). SILVER SHIELD(R).

FOR LIMITED SERVICE ONLY: POLYVINYL ALCOHOL. (DEGRADES IN WATER)

OTHER PROTECTIVE EQUIPMENT: BOOTS, APRONS, OR CHEMICAL SUITS SHOULD BE USED WHEN NECESSARY TO PREVENT SKIN CONTACT. PERSONAL PROTECTIVE CLOTHING AND USE OF EQUIPMENT MUST BE IN ACCORDANCE WITH 29 CFR 1910.133 AND 29 CFR 1910.132.

SECTION IX - SPECIAL PRECAUTIONS**PRECAUTIONS TO BE TAKEN DURING HANDLING AND STORING:**

- DO NOT USE IN POORLY VENTILATED OR CONFINED AREAS WITHOUT PROPER RESPIRATORY PROTECTION (SEE SECTION 8).
- HUB-THANE CS VAPORS ARE HEAVIER THAN AIR AND WILL COLLECT IN LOW AREAS.
- KEEP CONTAINER CLOSED WHEN NOT IN USE.
- STORE ONLY IN CLOSED, PROPERLY LABELED CONTAINERS.
- LIQUID OXYGEN OR OTHER STRONG OXIDANTS MAY FORM EXPLOSIVE MIXTURES WITH HUB-THANE CS.
- THIS MATERIAL OR ITS VAPORS WHEN IN CONTACT WITH FLAMES, HOT GLOWING SURFACES OR ELECTRIC ARCS CAN DECOMPOSE TO FORM HYDROGEN CHLORIDE GAS AND TRACES OF PHOSGENE.
- **AVOID CONTAMINATION OF WATER SUPPLIES:** HANDLING, STORAGE AND USE PROCEDURES MUST BE CAREFULLY MONITORED TO AVOID SPILLS OR LEAKS. ANY SPILL OR LEAK HAS THE POTENTIAL TO CAUSE UNDERGROUND WATER CONTAMINATION WHICH MAY, IF SUFFICIENTLY SEVERE, RENDER A DRINKING WATER SOURCE UNFIT FOR HUMAN CONSUMPTION. CONTAMINATION THAT DOES OCCUR CANNOT BE EASILY CORRECTED.
- DO NOT STORE OR STACK ALUMINUM IN CONTACT WITH HUB-THANE CS TO PREVENT POSSIBLE SOLVENT DECOMPOSITION (STACKING CORROSION).
- CAUTION SHOULD BE TAKEN NOT TO USE IN PRESSURIZED OR TOTALLY ENCLOSED SYSTEM OF ALUMINUM CONSTRUCTION. EXAMPLE: PAINT OR ADHESIVE SPRAY SYSTEM.

ASTRO PRODUCT CODE # 10115

BC 0330

HUB-THANE

CONTINUED

- A CHLORINATED SOLVENT USED AS A FLASHPOINT SUPPRESSANT MUST BE ADDED IN SUFFICIENT QUANTITY OR THE RESULTANT MIXTURE MAY HAVE A FLASHPOINT LOWER THAN THE FLAMMABLE COMPONENT.
- DO NOT USE CUTTING OR WELDING TORCHES ON EMPTY DRUMS THAT CONTAINED HUB-THANE UNLESS PROPERLY PURGED AND CLEANED.

OTHER PRECAUTIONS:

- DO NOT BREATHE VAPORS! HIGH VAPOR CONCENTRATIONS CAN CAUSE DIZZINESS, UNCONSCIOUSNESS OR DEATH. LONG-TERM OVEREXPOSURE MAY CAUSE POSSIBLE CENTRAL NERVOUS SYSTEM DAMAGE.
- USE ONLY WITH ADEQUATE VENTILATION. VENTILATION MUST BE SUFFICIENT TO LIMIT EMPLOYEE EXPOSURE TO HUB-THANE CS BELOW PERMISSIBLE LIMITS. OBSERVANCE OF LOWER LIMITS (OUTLINED IN SECTION V) IS ADVISABLE. EYE IRRITATION, DIZZINESS AND/OR DRUNKENNESS ARE SIGNS OF OVEREXPOSURE.
- AVOID CONTACT WITH EYES. WILL CAUSE IRRITATION AND PAIN.
- AVOID PROLONGED OR REPEATED CONTACT WITH SKIN. MAY CAUSE IRRITATION OR DERMATITIS.
- DO NOT SWALLOW. SWALLOWING MAY CAUSE INJURY OR DEATH.
- DO NOT EAT, DRINK OR SMOKE IN WORK AREAS.

COMMENTS:

TSCA - HUB-THANE IS ON THE TSCA INVENTORY UNDER CAS #71-55-6. HUB-THANE FORMULATIONS CONTAIN STABILIZERS THAT ARE LISTED ON THE TSCA INVENTORY.

SARA TITLE III - A) 311/312 CATEGORIES - ACUTE, B) LISTED IN SECTION 313 AS 1,1,1-TRICHLOROETHANE (METHYLCHLOROFORM), ALSO CONTAINS SEC BUTANOL WHICH IS LISTED IN SECTION 313, C) NOT LISTED AS AN "EXTREMELY HAZARDOUS SUBSTANCE" IN SECTION 302.

CERCLA - LISTED IN TABLE 302.4 OF 40 CFR PART 302 AS A HAZARDOUS SUBSTANCE WITH A REPORTABLE QUANTITY OF 1000 POUNDS. RELEASES TO AIR, LAND, OR WATER WHICH EXCEED THE RQ MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.

RCRA - WASTE HUB-THANE CS AND CONTAMINATED SOILS/MATERIALS FROM SPILL CLEANUP ARE U226 HAZARDOUS WASTE AS PER 40 CFR 261.33 AND MUST BE DISPOSED OF ACCORDINGLY UNDER RCRA. SEE 40 CFR 261.33(C) AND 261.7(B)(3) FOR CLEANING REQUIREMENTS FOR EMPTY CONTAINERS.

EPA OZONE - WARNING - CONTAINS METHYL CHLOROFORM A SUBSTANCE WHICH HARMS PUBLIC HEALTH AND THE ENVIRONMENT BY DESTROYING OZONE IN THE UPPER ATMOSPHERE.

CALIFORNIA PROP. 65 - THIS PRODUCT CONTAINS ETHYLENE DICHLORIDE, A PROCESS IMPURITY AT LESS THAN 0.1% . PROP. 65 LISTS THIS COMPOUND AS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

CANADA WHMIS - SENSITIZATION TO PRODUCT: NONE KNOWN; REPRODUCTIVE TOXICITY: NONE KNOWN; ODOR THRESHOLD: NOT KNOWN; PRODUCT USE: DEGREASING SOLVENT; REQUIRES POISON SYMBOL (CLASS D.1).

66-43

MULTI-PURPOSE CLEANER/DEGREASER SOAP

SOLUTION DISPOSAL PROCEDURE

LIQUID CONCENTRATE SOLUTION: LPS PRECISION CLEAN (02755), MULTI-PURPOSE CLEANER/DEGREASER
BIODEGRADABLE LIQUID CONCENTRATE SOAP

YEARS USED: 2001 TO PRESENT

ANNUAL USAGE: 25 CONCENTRATED GALLONS

SUPPLIED BY: ORCHARD SUPPLY HARDWARE

MIXTURE RATIO : 25 GALLONS TO 8 OUNCES

LOCATION: PLANT PACKAGING WAREHOUSE, TWO 25 GALLON TANKS

- 1 Place empty 5 gallon bucket under the tank drain plug.
- 2 Drain the spent cleaning solution by opening the drain plug.
- 3 Fill the bucket 3/4 full only to avoid spillage, close drain plug.
- 4 Repeat until the tank is emptied of the used spent cleaning solution.
- 5 Dispose of the spent solution into the 500 gallon recycle container located in the metal chip yard.
- 6 Use extreme caution to avoid any fluid spillage on to the floor.
- 7 Any spillage will be quickly be cleaned up using white cloth shop towels. Soiled cloth shop towels will be placed into the soiled bin located in the inspection department and are to be picked-up by Aramark cleaning service.
- 8 See the material safety data sheets for the LPS Precision Clean solution, for product identification and safety use.



22-22

MATERIAL SAFETY DATA SHEET

LPS Precision Clean Concentrate

Section 1 • Product and Company Identification

Manufacturer's Name: LPS Laboratories

Chemical Family: Alkaline, aqueous solution

Trade Name: LPS Precision Clean Concentrate

Telephone Number: 770-243-8800

Part Numbers: 02701, 02705, 02755

Emergency Telephone Number:

1-800-424-9300 Chemtrec;
Outside U.S.: (703) 527-3887

Address:

4647 Hugh Howell Road
Tucker, GA USA 30085-5052

Website: <http://www.lpslabs.com>

PLAIN LANGUAGE HAZARD SUMMARY

Material Safety Data Sheets can be confusing. Federal and State laws require us to include a great deal of technical information that probably won't help the non-professional. LPS includes this "PLAIN LANGUAGE HAZARD SUMMARY" to address the questions and concerns of the average worker. If you have additional health, safety or product questions, don't hesitate to call us at 800/241-8334.

Worker Toxicity

LPS PRECISION CLEAN CONCENTRATE is an industrial chemical. It is a specialized highly alkaline cleaner designed to remove grime, oils, and light grease from metal, concrete and other durable surfaces. It contains sodium metasilicate, a strongly alkaline material that can be irritating to skin and eyes. Avoid extended exposure to unprotected skin. Don't get it in your eyes (it stings), or breathe heavy mist (if working with pressure washing equipment in poorly ventilated areas). For more exposure and first aid information, refer to MSDS Sections 2, 8 and 11.

Flammability

LPS PRECISION CLEAN CONCENTRATE is non-flammable under nearly all conditions. However, we do not know its compatibility with liquid oxygen – do not use on LOX systems without thorough testing.

Disposal

LPS PRECISION CLEAN CONCENTRATE is quite alkaline, even after dilution in water. However, after the product has been exhausted in a typical cleaning process, its pH level will be significantly reduced, and in some extreme cases may essentially be neutral. In most cleaning operations, suitability for disposal is determined not just by pH level but by the end-user's ability to separate suspended oil from the water. Levels of acceptable oil remaining in the spent cleaning solution can vary from one local jurisdiction to another. Consult your local P.O.T.W. (Publicly Owned Treatment Works) for instructions on how to dispose of spent cleaning solution down sanitary sewer lines. Also, see section 13 for additional disposal information.



MATERIAL SAFETY DATA SHEET

LPS Precision Clean Concentrate

Section 2 • Hazards Identification

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency Overview: WARNING: May cause eye irritation.

Primary route(s) of entry: Skin and Eye contact.

Potential Acute Health Effects:

Eyes: Irritating to eyes

Skin: Repeated exposure may cause skin dryness or cracking.

Inhalation: Inhalation of large quantities of spray mist may cause irritation of the respiratory tract.

Ingestion: Product has a low order of acute oral toxicity, but ingestion of large quantities may cause nausea, vomiting, and gastrointestinal irritation.

Potential Chronic Health Effects:

Carcinogenic Effects: NTP: No IARC: No OSHA: No

Mutagenic Effects: None

Teratogenic Effects: None

Medical conditions aggravated by exposure: Persons with pre-existing skin disorders or chronic respiratory diseases should avoid exposure.

Signs and Symptoms

Stinging in eyes. Repeated or prolonged skin contact can cause redness, irritation, and scaling of the skin (dermatitis). Breathing of high mist concentrations may cause irritation of throat and eyes.

Section 3 • Composition / Information on Ingredients

Component	CASRN	Percent by Weight
Sodium Metasilicate	6834-92-0	2 – 4 %
Dipropylene Glycol Methyl Ether	34590-94-8	5 – 7 %

Section 4 • First Aid Measures

Eyes: Check for and remove contact lenses. If irritation or redness develops, flush eyes with cool, clean, low-pressure water for at least 15 minutes. Hold eyelids apart to ensure complete irrigation of the eye and eyelid tissue. Do not use eye ointment. Seek medical attention immediately.



MATERIAL SAFETY DATA SHEET

LPS Precision Clean Concentrate

Section 4 • First Aid Measures - continued

- Skin:** Remove contaminated shoes and clothing. Clean affected area thoroughly with mild soap and water. Do not use ointments. Seek medical attention if irritation persists.
- Inhalation:** Immediately move victim to fresh air. If victim is not breathing, immediately begin rescue breathing. If heart has stopped, immediately begin cardiopulmonary resuscitation (CPR). If breathing is difficult, seek medical attention immediately.
- Ingestion:** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If spontaneous vomiting is about to occur, place victim's head below knees. If victim is drowsy or unconscious, place on the left side with head down. Do not leave victim unattended. Seek medical attention immediately.

Section 5 • Fire Fighting Measures

- Products of Combustion:** Does not burn.
- Sensitivity to Impact:** None **Sensitivity to Static Discharge:** None
- Protection Clothing (Fire):** None.
- Special Remarks on Explosion Hazards:** None.

Section 6 • Accidental Release Measures

- Small Spill and Leak:** Absorb with an inert material and dispose of properly.
- Large Spill and Leak:** For large spills, secure the area and control access. Dike far ahead of a liquid spill to ensure complete collection. Pick up free liquid for disposal using absorbent pads, sand, or other inert non-combustible absorbent materials. Place into appropriate waste containers for later disposal. Do not flush to sewer.

Section 7 • Handling and Storage

- Handling:** Use appropriate personal protective equipment and avoid direct contact with skin. After handling, always wash hands thoroughly with soap and water. Use only with adequate ventilation. Avoid breathing spray mists.
- Storage Precautions:** Keep in original container at ambient temperatures. Do not allow product to freeze. Keep container closed. Keep out of the reach of children.



MATERIAL SAFETY DATA SHEET

LPS Precision Clean Concentrate

Section 8 • Exposure Controls / Personal Protection

Ingredients	CASRN	OSHA PEL-TWA	ACGIH-TLV	Other Limits
Sodium Metasilicate	6834-92-0	Not established	Not established	Not established
Dipropylene Glycol Methyl Ether	34590-94-8	100 ppm	100 ppm	150 ppm

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

Personal Protection:

Eyes: Safety glasses.

Respiratory : Use appropriate respirator if ventilation is inadequate.

Hands: Use solvent resistant gloves.

General Hygiene Considerations: Wash thoroughly after handling. Have eye-wash facilities immediately available.

Section 9 • Physical and Chemical Properties

Appearance:	Liquid.	Colour:	Turquoise
Odour/Taste:	Citrus.	Vapour Pressure:	~24 mm Hg, @ (25 °C)
Solubility Description:	100% in water	Evaporation Rate:	1 (H ₂ O=1)
Boiling Point (°C):	100 @ 760mmHg	Flash Point (°C):	None
Specific Gravity @ 20 °C (Water=1):	1.07	Flash Point Method:	Tag-Closed Cup.
Vapour Density (air=1):	>1	Auto Ignition Temperature (°C):	none
V.O.C. Content:	Conc: 63 g/L	Partition Coefficient (octanol/water):	> 1.0
Flammable limits (estimated):	LOWER: N.E. UPPER: N.E.	Viscosity:	<3 centistokes @ 25°C
pH:	13.0		



MATERIAL SAFETY DATA SHEET

LPS Precision Clean Concentrate

Section 10 • Stability and Reactivity

Stability and Reactivity: The product is stable.

Incompatibility with Various Substances: Extremely reactive or incompatible with oxidizing agents.

Hazardous decomposition products: These products are carbon oxides (CO, CO₂)

Hazardous polymerization: Will not occur.

Section 11 • Toxicological Information

Acute and Chronic Toxicity

A: General Product Information

Following exposure to vapors, this material can produce central nervous system depression. High atmospheric concentrations can result in eye, nasal and respiratory tract irritation. However, if handled in accordance with good industrial hygiene practice, this product will not present a significant hazard in the workplace.

Ingredients	CASRN	LC-50	LD-50
Sodium Metasilicate	6834-92-0	Not established	Oral LD50 Rat: 1153 mg/kg; Oral LD50 Mouse: 770 mg/kg
Dipropylene Glycol Methyl Ether	34590-94-8	Not established	Oral LD50 Rat: 5400 µL/kg; Dermal LD50 Rabbit: 10 mL/kg

Section 12 • Ecological Information

Component Data: Acute Aquatic Toxicity

Component	CASRN	Test	Species	Results
Sodium Metasilicate	6834-92-0	48-hour EC ₅₀	Daphnia magna	4857 mg of 35% solution per litre
		96-hour EC ₅₀	Brachydanio rerio	3185 mg of 35% solution per litre at pH 10.1
Dipropylene glycol monomethyl ether	34590-94-8	48-hour EC ₅₀	Daphnia magna	1919 mg/L
		96-hour EC ₅₀	Pimephales promelas	>10,000 mg/L

Section 13 • Disposal Considerations

Waste Status: This product, if deemed unusable and classified as "waste" is a RCRA hazardous waste carrying waste code D002 (Corrosive).

Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information inaccurate, incomplete, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive than federal laws and regulations.



MATERIAL SAFETY DATA SHEET

LPS Precision Clean Concentrate

Section 14 • Transport Information

This product is not regulated by any mode of transportation.

Section 15 • Regulatory information

U.S. Federal Regulations:

TSCA 8(b) inventory: All of the ingredients are listed on the TSCA inventory or are exempt.

RCRA Hazardous Waste No.: D002 (corrosive)

CERCLA Sections 102a/103 Hazardous Substances (40 CFR part 302) Reportable Quantity: none

SARA TITLE III Sections 311/312 Hazardous Categorization (40 CFR part 370): Immediate (Acute) Health Hazard

SARA TITLE III Section 313: No individual section 313 component is present at or above 1%.

State Regulations:

New Jersey RTK: Water (CASRN# 7732-18-5), Dipropylene Glycol Methyl Ether (CASRN# 34590-94-8), Alcohols, C10-16, ethoxylated (CASRN# 68002-97-1), Sodium Metasilicate (CASRN# 6834-92-0), Tetrapotassium Pyrophosphate (CASRN # 7320-34-5)

California Proposition 65: None.

California and OTC States: This product in its concentrated form does not conform to consumer regulations.

Section 16 • Other Information

MSDS# 12765

Responsible Name: Ed Williams

Technical Manager

HMIS-III

Health: [] 1

Flammability: 0

Physical Hazard: 0

NFPA

flammability



Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Ed Williams, Technical Manager
LPS Laboratories
A division of Illinois Tool Works

Form #2524

2 2 - 45

REPLACEMENT AND DISPOSAL OF CASTROL KLEEN 3625

SUPPLIED BY: Hasco Oil Co.
years used: As needed, Last used 1995
PRODUCT NAME: Castrol Kleen 3625

Location: CNC coolant reservoir tank.

Capacity: 5 gallons

Annual usage: Used as needed, last used approx 1995

1. Used to flush bacteria and other odors from the cooling system. Used only when needed.
2. Containment and storage of Castrol Kleen 3625 is within the coolant reservoir tank.
3. Spent coolant is drained into 3/4 full 5 gallon buckets which is disposed into the 500 gallon recycable container. This is repeated until the reservoir tank is completely emptied of the spent coolant.
4. Castrol Kleen is poured into the bed of the CNC and allowed to fill into the coolant reservoir tank. The cooling system is allowed to run approx 2 hrs with the Castrol Kleen flowing through the system and various spouts and hoses to ensure removal of all bacteria.
5. The spent Castro Kleen is drained per procedure "3" and disposed in the same manner.
6. Any spillage despite how small the trace amount shall have absorb sand tossed on the spill and immediately cleaned up. The contaminated sand will be deposited into the 10 gallon "solid waste" drum located in the chip yard. When the "solid waste" drum is 3/4 full, the waste shall be taken to an approved city "Hazardous Waste" round up site for disposal.

Material Safety Data Sheet



1. Chemical product and company identification

Product name CASTROL KLEEN 3625
MSDS # 11029
Code 11029-AE
Product use Cleaner.
Manufacturer Castrol Industrial North America, Inc.
 150 W. Warrenville Road
 Naperville, IL 60563
Supplier Castrol Industrial North America, Inc.
 150 W. Warrenville Road
 Naperville, IL 60563
 Product Information: 1-800-621-2661
EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Composition/information on ingredients

Ingredient name	CAS #	% by weight
Ethanolamine; 2-Aminoethanol	141-43-5	5 - 10
Sodium hydroxide	1310-73-2	1 - 5
Potassium hydroxide	1310-58-3	1 - 5

3. Hazards identification

Physical state Liquid.
Color Yellowish. Amber.
Emergency overview DANGER! CORROSIVE.
 CAUSES EYE DAMAGE.
 CAUSES SKIN BURNS.
 CAUSES RESPIRATORY TRACT BURNS.
 CAUSES SKIN IRRITATION.
 Do not ingest. Do not get in eyes, on skin or clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.
Routes of entry Dermal contact. Eye contact. Inhalation. Ingestion.
Potential health effects
Eyes Corrosive. Causes eye damage. Causes severe eye irritation.
Skin Corrosive. Causes skin burns. Causes skin irritation.
Inhalation Causes respiratory tract burns.
Ingestion Ingestion may cause gastrointestinal irritation and diarrhea.
Medical conditions aggravated by over-exposure None identified.

Product name CASTROL KLEEN 3625

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4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

5. Fire-fighting measures

Flammability of the product	Non-flammable.
Products of combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...), phosphates. Some metallic oxides.
Unusual fire/explosion hazards	Non-explosive in presence of open flames, sparks and static discharge, of shocks, of heat.
Fire-fighting media and instructions	In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.
Protective clothing (fire)	Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Do not ingest. Do not get in eyes, on skin or on clothing. Avoid contact with skin and clothing. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable. Use only with adequate ventilation. Wash thoroughly after handling. DO NOT ADD NITRITES TO THIS FLUID.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

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8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Occupational exposure limits

Ethanolamine; 2-Aminoethanol

ACGIH TLV (United States, 9/2004).

STEL: 15 mg/m³ 15 minute(s).

STEL: 6 ppm 15 minute(s).

TWA: 7.5 mg/m³ 8 hour(s).

TWA: 3 ppm 8 hour(s).

OSHA PEL (United States, 6/1993).

TWA: 6 mg/m³ 8 hour(s).

TWA: 3 ppm 8 hour(s).

Sodium hydroxide

ACGIH (United States).

CEIL: 2 mg/m³

ACGIH TLV (United States, 9/2004).

CEIL: 2 mg/m³

OSHA (United States).

CEIL: 2 mg/m³

OSHA PEL (United States, 6/1993).

TWA: 2 mg/m³ 8 hour(s).

Potassium hydroxide

ACGIH (United States).

CEIL: 2 mg/m³

ACGIH TLV (United States, 9/2004).

CEIL: 2 mg/m³

Control Measures

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are close to the work-station location.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protection

Eyes

Avoid contact with eyes. Safety glasses with side shields.

Skin and body

Do not get on skin or clothing. Wear clothing and footwear that cannot be penetrated by chemicals or oil. Wear face shield.

Respiratory

Use only with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Hands

Wear gloves that cannot be penetrated by chemicals or oil.

Not available.



Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state	Liquid.
pH	12 to 12.6 at 3%
Odor	Mild.
Color	Yellowish. Amber.
Specific gravity	1.152 to 1.172
Density	1162 kg/m ³ (1.162 g/cm ³)
Solubility	Easily soluble in cold water, hot water.

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Dispersibility properties See solubility in water.

10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	None known.
Incompatibility with various substances	Reactive with oxidizing agents.
Hazardous decomposition products	Not available.
Hazardous polymerization	Will not occur.

11. Toxicological information

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
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Mutagenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
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Reproductive effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.
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Teratogenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.
----------------------------	--

Other chronic toxicity data	Alkanolamine: This product contains an alkanolamine. In all metalworking fluids containing amines, there is a potential for forming nitrosamines which are animal carcinogens. Therefore, no nitrites or related nitrosating agents should be added to such compositions.
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12. Ecological information

Ecotoxicity	No testing has been performed by the manufacturer.
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13. Disposal considerations

Waste information	Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.
-------------------	---

RCRA Waste Code(s)	D002
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Consult your local or regional authorities.

14. Transport information

International transport regulations

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Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN 1760	Corrosive liquid, n.o.s. (Ethanolamine; 2-Aminoethanol, Potassium hydroxide)	8	III		Not determined.
TDG Classification	UN 1760	Corrosive liquid, n.o.s. (Ethanolamine; 2-Aminoethanol, Potassium hydroxide)	8	III		Not determined.
IMDG Classification	Not determined.	Not determined.	Not determined.	Not determined.	----	Not determined.
IATA Classification	UN 1760	Corrosive liquid, n.o.s. (Ethanolamine; 2-Aminoethanol, Potassium hydroxide)	8	III		Not determined.

15. Regulatory information

U.S. Federal regulations

US INVENTORY (TSCA): In compliance.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: KLEEN 3625:
Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

SARA 313

Form R - Reporting requirements

This product does not contain any hazardous ingredients at or above regulated thresholds.

Supplier notification

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4): KLEEN 3625

State regulations

Massachusetts RTK: Ethanolamine; 2-Aminoethanol; Sodium hydroxide; Potassium hydroxide
New Jersey: Ethanolamine; 2-Aminoethanol; Sodium hydroxide; Potassium hydroxide; polyethylene glycol octaphenyl ether

Pennsylvania RTK: Ethanolamine; 2-Aminoethanol (generic environmental hazard); Sodium hydroxide (environmental hazard, generic environmental hazard); Potassium hydroxide (environmental hazard, generic environmental hazard)

WARNING: This product contains a chemical known to the State of California to cause cancer. 1,4-dioxane; Cobalt compound; Nickel

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. Ethylene oxide

Inventories

AUSTRALIAN INVENTORY (AICS): Not listed.

CANADA INVENTORY (DSL): Not listed.

CHINA INVENTORY (IECS): Not determined.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): Not determined.

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KOREA INVENTORY (ECL): Not determined.

PHILIPPINE INVENTORY (PICCS): Not listed.

16. Other information

Label requirements

DANGER! CORROSIVE.

CAUSES EYE DAMAGE.

CAUSES SKIN BURNS.

CAUSES RESPIRATORY TRACT BURNS.

CAUSES SKIN IRRITATION.

HMIS® Rating :

Health 3 *

Flammability 1

Physical 0

Hazard

Personal D

protection

**National Fire
Protection
Association
(U.S.A.)**



Other special considerations

No additional remark.

History

Date of issue

12/21/2005.

Date of previous issue

09/29/2005.

Prepared by

Product Stewardship

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from us.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken.

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24597293

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address ALLAN AIRCRAFT 11643 VAN OWEN STREET NORTH HOLLYWOOD, CA 91609 Phone: 818-765-4992				A. State Manifest Document Number 24597293		B. State Generator's ID			
5. Transporter 1 Company Name ASSBURY ENVIRONMENTAL SERVICES				6. US EPA ID Number CA D 0 2 8 2 7 7 0 3 6		C. State Transporter's ID [Reserved]			
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone (900) 974-4495			
9. Designated Facility Name and Site Address DEMENNO / KERDOON 2000 NORTH ALAMEDA STREET COMPTON, CA 90222				10. US EPA ID Number CA T 0 8 0 0 1 3 3 5 2		G. State Facility's ID CAT080013352			
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. WATER SOLUBLE OIL, NON RCRA HAZARDOUS WASTE, LIQUID				901 TT		01 000		G	
b. THIS WASTE STREAM HAS BEEN QUALIFIED FOR RECYCLING/TREATMENT AT THE DEMENNO/KERDOON FACILITY IN COMPTON, CALIFORNIA. THIS FACILITY HAS THE NECESSARY PERMITS TO RECEIVE YOUR WASTE STREAM AS QUALIFIED. OUR EPA NUMBER IS CAT080013352.								I. Waste Number State 135 EPA/Other NONE	
c.								State EPA/Other	
d.								State EPA/Other	
J. Additional Descriptions for Materials Listed Above 11A) 198461 POKA08000554 PRO#51574510 RB				K. Handling Codes for Wastes Listed Above a. 01		b.		c.	
15. Special Handling Instructions and Additional Information USE PPE NAERG # 11A 171 SITE 11643 VANOWEN ST, NORTH HOLLYWOOD, CA EMERGENCY CONTACT CHEMTREC 1-800-424-9300				SEP 16 2005					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.				Printed/Typed Name JOSEPH L. CARTER		Signature Joseph L. Carter		Month Day Year 08/31/05	
17. Transporter 1 Acknowledgement of Receipt of Materials				Printed/Typed Name JOSEPH L. CARTER		Signature Joseph L. Carter		Month Day Year 08/31/05	
18. Transporter 2 Acknowledgement of Receipt of Materials				Printed/Typed Name		Signature		Month Day Year	
19. Discrepancy Indication Space QUANTITY DISCREPANCY GREATER THAN 10% VARIATION RECONCILED WITH GENERATOR'S TRANSPORTER 09-01-05 WITH 11643 VANOWEN ST OF 861 GALLONS RECEIVED				Printed/Typed Name JOSE RAMOS		Signature JOSE RAMOS		Month Day Year 08/31/05	
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.				Printed/Typed Name JOSE RAMOS		Signature JOSE RAMOS		Month Day Year 08/31/05	

DO NOT WRITE BELOW THIS LINE.

Yellow: TSDf SENDS THIS COPY TO GENERATOR WITHIN 30 DAYS.
(Generators who submit hazardous waste for transport out-of-state, produce completed copy of this copy and send to DTSC within 30 days.)

See reverse side for instructions.
Please type or print clearly. Press Hard.

CALIFORNIA HAZARDOUS WASTE MANIFEST

State Department of Health Services
HAZARDOUS MATERIALS MANAGEMENT SECTION
744 P Street, Sacramento, CA 95814

1 Manifest Number 428 - 003897

GENERATOR

(GENERATOR MUST COMPLETE)

2 Name ALAN AIRCRAFT

EPA # 15MA4415 ENFERA TARS

Address 11643 VAN OWEN Phone (513) 765-4992

City, State, Zip

NO HOLLYWOOD CAL 91609

Address 1704 West First Street Phone (213) 334-5117

City, State, Zip Azusa, California 91702

3 Designated TSD Facility (Authorized to operate under an approved state program or federal program.)

Name OIL AND SOLVENT PROCESS COMPANY

4 Alternate TSD Facility

Name ALDIE

EPA # 15MA4415

Address 1704 West First Street

City, State, Zip Azusa, California 91702

5 U.S. DOT PROPER SHIPPING NAME

WASTE 11 TRICHLOROETHANE

WASTE F 0 0 1

HAZARD CLASS

ORM A

U.S. DOT ID NO. 2831

WEIGHT OR VOLUME

350

UNITS GALLONS

NUMBER OF CONTAINERS - 7

TYPE: ☒ DRUMS ☐ BAGS ☐ CARTONS

☐ TANK TRUCK ☐ DUMP TRUCK

☐ OTHER

6 Waste Category

63

7 Ext. Haz. Waste Permit No. NA

8 Generating Process

PARTS HOT DEGREASING

LIST COMPONENTS:

CONCENTRATION RANGE

LIST COMPONENTS:

CONCENTRATION RANGE

9 A. 11 TRICHLOROETHANE 93 89 UNITS

B. INHIBITORS 4 1 UNITS

C. OIL, DIRT & WATER 8 4 UNITS

D. NON-HAZARDOUS MATERIAL 8 4 UNITS

10 WASTE PROPERTIES: pH 6 ☐ Solid ☐ Liquid ☐ Sludge ☐ Toxic ☐ Flammable ☐ Corrosive/Irritant ☐ Other

11 PHYSICAL STATE: ☐ Solid ☐ Liquid ☐ Sludge ☐ Slurry ☐ Gas ☐ Other

12 SPECIAL HANDLING INSTRUCTIONS: ☒ Gloves ☒ Goggles ☐ Respirator ☐ Other

13 DRUMS ARE NOT LEAKING

14 MAKE SURE THAT DRUMS ARE NOT LEAKING

15 DRUMS ARE NOT LEAKING

16 DRUMS ARE NOT LEAKING

17 DRUMS ARE NOT LEAKING

18 DRUMS ARE NOT LEAKING

19 DRUMS ARE NOT LEAKING

20 DRUMS ARE NOT LEAKING

21 DRUMS ARE NOT LEAKING

22 DRUMS ARE NOT LEAKING

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35 DRUMS ARE NOT LEAKING

36 DRUMS ARE NOT LEAKING

37 DRUMS ARE NOT LEAKING

See reverse side for Instructions.
Please type or print clearly. Press Hard.

RECEIVED CALIFORNIA HAZARDOUS WASTE MANIFEST

State Department of Health Services
HAZARDOUS MATERIALS MANAGEMENT SECTION
744 P Street, Sacramento, CA 95814

1 Manifest Number 015-006151

JAN 15 1982

3 Designated TSD Facility (Authorized to operate under an approved state program or federal program)

4 Alternate TSD Facility

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REMOVAL AND DISPOSAL OF METAL TRIMMINGS / CHIPS.
PROCEDURE AND CONTAINMENT OF METAL TRIMMINGS AND CHIPS

ALL STAINLESS STEEL AND MISCELLANEOUS ALLOYS AND ALUMINUM METAL TRIMMINGS

All metal chip totes / containers located in the chip yard shall be placed under a protected cover to shield it from all weather elements. The tote containers shall be placed over a protected foundation surface that contains absorb sand underneath which will allow coolant drippings to be captured and then can be removed and properly disposed into the "Solid Waste" container. The absorb sand shall be evaluated and removed at the minimum of every 6 months.

Removal and disposal of metal trimmings / chips, CNC Lathes:

1. CNC lathe trimmings / chips shall be "raked" up into the removal shoot. (performed just prior to the end of the shift)
2. Allow the metal chips to remain in the removal shoot overnight to allow the excess coolant to drip off.
3. Remove the clean chips from the "shoot" and load into a chip pan and properly dispose into a tote / container in the chip yard.

Removal and disposal of metal trimmings / chips, miscellaneous machines:

1. Small lathes will follow the same procedure as the "CNC" lathes were the chips will be allowed to drip clean before removing them from the lathe bed. Metal trimming will be deposited into the tote / container in the chip yard.
2. Metal trimming and chips produced by the End Mills shall be swept into a pail and deposited into the tote / container in the chip yard.

REPLACEMENT AND DISPOSAL OF CASTROL HYPSPIN R & O 220

SUPPLIED BY: Hasco Oil Co.
years used: 1991 to present
PRODUCT NAME: Castrol Hypsin R & O 220

Location: Transmission oil for C5 CNC
Capacity: 2 gallons
Annual usage: approx 5 gallons

1. Containment and storage of the R & O 220 is within the Transmission reservoir.
2. The transmission fluid is drained by placing a 5 gallon bucket under the drain plug and emptying the reservoir.
3. Spent transmission oil is disposed into the 500 gallon recycle container located in the metal chip yard.
4. New Hypsin R & O 220 is funneled into the transmission reservoir and tightly capped.
5. Any spillage despite how small the trace amount shall have absorb sand tossed on the spill and immediately cleaned up. The contaminated sand will be deposited into the 10 gallon "solid waste" drum located in the chip yard. When the "solid waste" drum is 3/4 full, the waste shall be taken to an approved city "Hazardous Waste" round up site for disposal.

Material Safety Data Sheet



1. Chemical product and company identification

Product name CASTROL HYPIN R&O 220
MSDS# 12031-AE
Code 12031-AE
Product use Lubricant
Manufacturer CASTROL INDUSTRIAL NORTH AMERICA INC.
1001 WEST 31ST STREET
DOWNERS GROVE, IL 60515-1280
TEL.: 1 - 630-241-4000 (USA)
Supplier CASTROL INDUSTRIAL NORTH AMERICA INC.
1001 West 31st Street
Downers Grove, IL 60515-1280
U.S.A.
1 (630) 241-4000 (USA)
EMERGENCY SPILL INFORMATION: 1 (800) 424-9300 CHEMTREC (USA)

2. Composition/information on ingredients

Ingredient name	CAS #	% by weight	Exposure limits
Residual oils (petroleum), solvent-dewaxed	64742-62-7	55 - 60	ACGIH (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Mist STEL: 10 mg/m ³ 15 minute(s). Form: Mist OSHA (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Mist
Highly refined mineral oil	72623-85-9	40 - 45	ACGIH (United States). STEL: 10 mg/m ³ 15 minute(s). Form: Oil mist, mineral TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral OSHA (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

3. Hazards identification

Physical state Liquid.
Color Clear. Amber. Color
Emergency overview CAUTION!
MAY CAUSE EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.
MAY CAUSE RESPIRATORY TRACT IRRITATION.

Product CASTROL HYPIN R&O 220
Name

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12031-AE

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Build 2.0.4

(ENGLISH)

Avoid prolonged or repeated contact with skin. Keep container closed. Wash thoroughly after handling. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis. Use with adequate ventilation. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Routes of entry

Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Health Effects

Eyes

May cause eye irritation.

Skin

May cause skin irritation.

Inhalation

May cause respiratory tract irritation.

Ingestion

Ingestion may cause gastrointestinal irritation and diarrhea.

**Medical conditions
aggravated by
overexposure:**

None identified.

See toxicological information (section 11)

4. First aid measures

Eye Contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops.

Skin Contact

Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

5. Fire-fighting measures

Flammability of the product

May be combustible at high temperature.

Flash point

243 °C (Open cup) Cleveland.

Products of combustion

These products are carbon oxides (CO, CO₂).

**Unusual fire/explosion
hazards**

This material is not explosive as defined by established regulatory criteria.

Non-explosive in presence of open flames, sparks and static discharge, of shocks, of heat, of oxidizing materials.

**Fire fighting media and
instructions**

In case of fire, use water fog, foam, dry chemicals, or carbon dioxide.

Protective clothing (fire)

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

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Name

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(ENGLISH)

6. Accidental release measures

Personal Precautions	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).
Environmental precautions and clean-up methods	If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways. See Section 13 for Waste Disposal Information.
Personal protection in case of a large spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

7. Handling and storage

Handling	Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Use only with adequate ventilation. Wash thoroughly after handling. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Empty containers may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Occupational exposure limits
Residual oils (petroleum), solvent-dewaxed	ACGIH (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Mist STEL: 10 mg/m ³ 15 minute(s). Form: Mist OSHA (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Mist
Highly refined mineral oil	ACGIH (United States). STEL: 10 mg/m ³ 15 minute(s). Form: Oil mist, mineral TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral OSHA (United States). TWA: 5 mg/m ³ 8 hour(s). Form: Oil mist, mineral

Control Measures	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.
Hygiene measures	Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.
Personal protection	
Eyes	Avoid contact with eyes. Safety glasses with side shield or chemical goggles.
Skin and Body	Avoid prolonged or repeated contact with skin. Wear suitable protective clothing.
Respiratory	Use only with adequate ventilation.
Hands	Wear suitable gloves.

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Consult local authorities for acceptable exposure limits.

9. Physical and chemical properties

Physical state	Liquid.
pH	Not applicable
Odor	Oily Odor
Color	Clear. Amber. Color
Specific Gravity	0.89
Solubility	Insoluble in cold water, hot water.
Viscosity	Kinematic: 198 to 242 mm ² /s (198 to 242 cSt) at 40°C

10. Stability and reactivity

Stability and Reactivity	The product is stable.
Conditions to avoid	None known.
Incompatibility with various substances	Reactive with oxidizing agents.
Hazardous Decomposition Products	Carbon Dioxide (CO ₂). nitrogen oxides (NO, NO ₂ ...)
Hazardous polymerization	Will not occur.

11. Toxicological information

Chronic toxicity

Carcinogenic effects	No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
Mutagenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a mutagen.
Reproductive effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as a reproductive toxin.
Teratogenic effects	No component of this product at levels greater than 0.1% is classified by established regulatory criteria as teratogenic or embryotoxic.

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12. Ecological information

Ecotoxicity

No testing has been performed by the manufacturer.

13. Disposal considerations

Waste information

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

RCRA Waste Code(s)

USED OIL

Consult your local or regional authorities.

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	Not regulated.	Not available.	Not available.	Not available.		Not available.
TDG Classification	Not regulated.	----	----	Not available.		Not available.
IMDG Classification	Not available.	Not available.	Not available.	Not available.		Not available.
IATA Classification	Not available.	Not available.	Not available.	Not available.		Not available.

15. Regulatory information

U.S. Federal regulations

US INVENTORY (TSCA): In compliance.

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 313

Form R - Reporting requirements

This product does not contain any hazardous ingredients at or above regulated thresholds.

Supplier notification

This product does not contain any hazardous ingredients at or above regulated thresholds.

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.

State regulations

No products were found.

California Prop 65: WARNING! This product contains trace amounts of the following chemicals which the State of California has found to cause cancer, birth defects or other reproductive harm.: Aniline; 2-Naphthylamine; Toluene

Product Name CASTROL HYPIN R&O 220

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Inventories

AUSTRALIAN INVENTORY (AICS): In compliance.

CANADA INVENTORY (DSL): In compliance.

CHINA INVENTORY (IECS): Not determined.

EC INVENTORY (EINECS/ELINCS): In compliance.

JAPAN INVENTORY (ENCS): Not listed.

KOREA INVENTORY (ECL): In compliance.

PHILIPPINE INVENTORY (PICCS): In compliance.

16. Other information

Label Requirements

CAUTION!

MAY CAUSE EYE IRRITATION.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

HMIS® Rating :

Health 1

Flammability 1

Physical 0

Hazard

Personal B

protection

**National Fire
Protection
Association
(U.S.A.)**



Other special considerations

PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200. No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA.

History

Date of issue

03/03/2004.

Date of previous issue

No Previous Validation.

Prepared by

Product Stewardship

Notice to reader

NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.

This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.

REPLACEMENT AND DISPOSAL OF AQUEOUS PRECISION CLEANER**YEARS USED: 1997 THRU 2001**

SERVICED AND SUPPLIED BY SAFETY-KLEEN SYSTEMS, INC.

PRODUCT NAME: Armakleen M-GP Aqueous Precision Cleaner

Location: Packaging Plant in the rework department adjacent the rework press.

Capacity: 20 gallon drum

Annual usage: approx 60 gallons

1. Containment and storage of the Aqueous solution was with-in the supplied 20 gallon container.
2. The Aqueous solution was replaced and removed by Safety-Kleen Systems approx every 3 to 4 months.
3. The part washer was a supplied item from Safety-Kleen .
4. Safety-Kleen transported new clean solution to the facility, unloaded the solution, hand trucked into the facility removed the part washer, sealed the spent solution positioned the new solution into place unsealed it and installed the part washer onto the 20 gallon drum.
5. The spent Aqueous solution was hand trucked out of the facility by Safety -Kleen Systems and loaded on to their truck and was then transported out and off the facility.

#2243



Armakleen® M-GP Aqueous Precision Cleaner
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Armakleen® M-GP Aqueous Precision Cleaner

SYNONYM(S): Not available

PRODUCT PART NUMBERS: 6332, 6432

PRODUCT USE: Aqueous, alkaline, concentrated cleaner that is to be diluted with water and used for cleaning aluminum, magnesium, titanium, ferrous and non-ferrous alloys as well as plastic, glass and composite materials. If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.

These numbers are for emergency use only. If you desire non-emergency product information, please call a telephone number listed below.

24-HOUR EMERGENCY TELEPHONES

MEDICAL:

1-800-752-7869

TRANSPORTATION (SPILL):

1-800-468-1760

MANUFACTURER:

The ArmaKleen Company
469 North Harrison Street
Princeton, NJ 08543
USA
(609) 683-5900

TECHNICAL INFORMATION: 1-800-332-5424

SUPPLIER:

Safety-Kleen Systems, Inc.
5400 Legacy Drive, Cluster II, Building 3
Plano, TX 75024
USA
(800) 669-5740

MSDS FORM NUMBER: 82850

THE ARMAKLEEN COMPANY MSDS NUMBER: 955G

ISSUE: November 21, 2003

ORIGINAL ISSUE: July 16, 1996

SUPERSEDES: May 12, 2003

PREPARED BY: ArmaKleen MSDS Coordinator

APPROVED BY: MSDS Task Force

Armakleen® M-GP Aqueous Precision Cleaner
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

WT%	NAME	SYNONYM	CAS NO.	OSHA PEL		ACGIH TLV®		LD ^a	LC ^b
				TWA	STEL	TWA	STEL		
3 to 7	Potassium Carbonate	Potash	584-08-7	15mg/m ^{3,c}	N. Av.	10mg/m ^{3,c}	N. Av.	2000	>4.96mg/L
3 to 7	Potassium Hydroxide	Caustic potash	1310-58-3	N. Av.	N. Av.	2mg/m ³	N. Av.	273	N. Av.
1 to 5	Sodium hydroxide	Caustic soda	1310-73-2	2 mg/m ³	N. Av.	(ceiling) 2mg/m ³	N. Av.	N. Av.	N. Av.
1 to 5	3,5,5-trimethylhexanoic acid	Isononanoic acid	3302-10-1	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.
1 to 5	Alcohol C6-C10, ethoxylated	Linear alcohol alkoxyate	68987-81-5	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.
1 to 5	Silicic acid, potassium salt	Potassium silicate	1312-76-1	N. Av. ^d	N. Av.	N. Av.	N. Av.	N. Av.	N. Av.
1 to 5	2-pyrrolidinone, 1-octyl	N-(n-octyl)-2-pyrrolidone	2687-94-7	N. Av.	N. Av.	N. Av.	N. Av.	2050	N. Av.

N.Av. = Not Available

^aOral-Rat LD₅₀(mg/kg)

^cPNOC (Particles Not Otherwise Classified)

*Supplier advises that this is a trade secret.

^bInhalation-Rat LC₅₀

^dmanufacturer recommended TWA 5mg/m³ (ceiling) respirable dust

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE

Liquid, clear, tan color, and mild detergent odor.

CAUTION!

HEALTH HAZARD

May irritate the respiratory tract (nose, throat, and lungs), eyes, and skin.

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs).

EYES: May cause irritation. Effects will be minimized with washing.

SKIN: May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

INGESTION

(SWALLOWING): Practically non-toxic. Ingestion may cause abdominal discomfort and may irritate the alimentary mucosa.

MEDICAL CONDITIONS

AGGRAVATED BY

EXPOSURE: Individuals with pre-existing respiratory tract (nose, throat, and lungs), eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Armakleen® M-GP Aqueous Precision Cleaner
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

CHRONIC: Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis).

CANCER INFORMATION: No known carcinogenicity. For more information, see **SECTION 11: CARCINOGENICITY**.

POTENTIAL ENVIRONMENTAL EFFECTS

Not available. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

SECTION 4: FIRST AID MEASURES

**INHALATION:
(BREATHING)** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

EYES: If irritation or redness from exposure to vapor or mist develops, move away from exposure into fresh air and flush with water for 5 minutes. Upon direct contact with liquid, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

SKIN: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.

**INGESTION:
(SWALLOWING)** Do NOT induce vomiting. Immediately get medical attention. Call medical emergency telephone number (1-800-752-7869) for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

NOTE TO PHYSICIANS: Treat symptomatically and supportively. Ingesting large amounts may cause systemic alkalosis. Treatment may vary with condition of victim and specifics of incident. Call medical emergency telephone number (1-800-752-7869) for additional information.

SECTION 5: FIRE FIGHTING MEASURES
--

FLASH POINT: >212°F (>100°C)

FLAMMABLE LIMITS IN AIR: Not applicable.

AUTOIGNITION

TEMPERATURE: Not applicable.

HAZARDOUS COMBUSTION

Armakleen® M-GP Aqueous Precision Cleaner
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

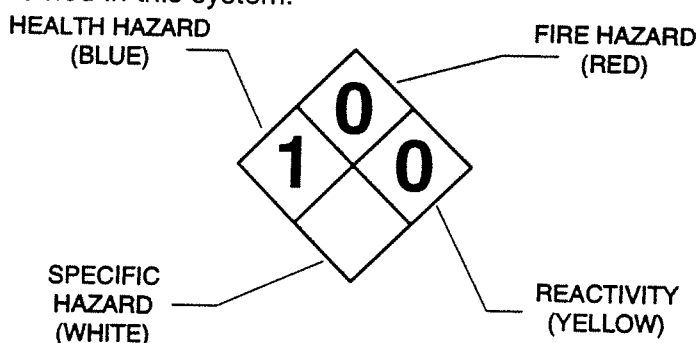
PRODUCTS: Product itself does not burn, but may decompose upon heating to produce carbon monoxide and nitrogen oxides.

CONDITIONS OF FLAMMABILITY: Product will not burn.

EXTINGUISHING MEDIA: Not applicable.

**NFPA 704
HAZARD
IDENTIFICATION:**

This information is intended solely for the use by individuals trained in this system.



FIRE FIGHTING INSTRUCTIONS: Keep storage containers cool with water spray. A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

FIRE AND EXPLOSION HAZARDS: Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact or static discharge.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spilled product is slippery. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. Contain away from surface waters and sewers. Contain spill as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean tool into a sealable container for disposal.

Additionally, for large spills: Dike far ahead of liquid spill for collection and later disposal.

There may be specific regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION**.

Armakleen® M-GP Aqueous Precision Cleaner
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 7: HANDLING AND STORAGE

HANDLING: Use clean tools. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes.

SHIPPING AND STORING: Keep container tightly closed when not in use and during transport. Store containers in a cool, dry place. Empty product containers may retain product residue and can be dangerous.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH-certified, combination N-, P-, or R- series particulate filter respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

EYE PROTECTION: Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

SKIN PROTECTION: Where skin contact is likely, wear nitrile, neoprene, or equivalent protective gloves; use of polyvinyl alcohol (PVA) or equivalent gloves is not recommended.

To avoid skin contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

PERSONAL HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco products. Clean contaminated clothing, shoes, and protective equipment before reuse. Discard contaminated clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

OTHER PROTECTIVE

Armakleen® M-GP Aqueous Precision Cleaner
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

EQUIPMENT: Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE,

APPEARANCE, AND ODOR: Liquid, clear, tan color, and mild detergent odor.

ODOR THRESHOLD: Not available.

MOLECULAR WEIGHT: Not applicable.

SPECIFIC GRAVITY: 1.05 (water = 1)

DENSITY: 8.8 LB/US gal (1050 g/l)

VAPOR DENSITY: Less than 1 (air = 1)

VAPOR PRESSURE: 17.5 mm Hg at 68°F (20°C) (approximately)

BOILING POINT: 212°F (100°C)

FREEZING/MELTING POINT: 32°F (0°C)

pH: 11.6

EVAPORATION RATE: less than 1 (butyl acetate = 1)

SOLUBILITY IN WATER: Complete.

FLASH POINT: >212°F (>100°C)

FLAMMABLE LIMITS IN AIR: Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures.

INCOMPATIBILITY: Avoid acids, oxidizing agents, or reducing agents.

REACTIVITY: Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

HAZARDOUS DECOMPOSITION None under normal temperatures and pressures. See

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PRODUCTS: also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS.**

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION: Based on best current information, there is no known human sensitization associated with this product.

MUTAGENICITY: Based on best current information, there is no known mutagenicity associated with this product.

CARCINOGENICITY: Based on best current information, there is no known carcinogenicity as regulated by OSHA; as categorized by ACGIH A1 or A2 substances; as categorized by ARC Group 1, Group 2A, or Group 2B agents; or as listed by NTP as either known carcinogens or substances for which there is limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

REPRODUCTIVE TOXICITY: Based on best current information, there is no known reproductive toxicity associated with this product.

TERATOGENICITY: Based on best current information, there is no known teratogenicity associated with this product.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there are no known toxicologically synergistic products associated with this product.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

OCTANOL/WATER PARTITION COEFFICIENT: Not available.

VOLATILE ORGANIC COMPOUNDS: Contains 0.0g/L VOC (as soaps and detergents) as per EPA Method 24.

SECTION 13: DISPOSAL CONSIDERATIONS

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DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

USEPA WASTE CODE(S): This product, if discarded, would not be a hazardous waste by listing, and is not expected to be a characteristic hazardous waste. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

SECTION 14: TRANSPORT INFORMATION

DOT: Not regulated.

TDG: Not regulated.

EMERGENCY RESPONSE GUIDE NUMBER: Not applicable.
Reference *North American Emergency Response Guidebook*

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 302 AND 304: This product does not contain any extremely hazardous substances listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312: This product poses the following health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard

SARA SECTION 313: This product does not contain toxic chemicals subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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CERCLA: Based on the ingredients listed in **SECTION 2**, this product contains the following "hazardous substances" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantity (RQ):

Material	CAS	RQ
Sodium hydroxide	1310-73-2	1000 LB (454 kg)
Potassium hydroxide	1310-58-3	1000 LB (454 kg)

TSCA: All the components of this product are listed on, or are automatically included as "naturally occurring chemical substances" on, or exempted from the requirement to be listed on, the TSCA Inventory.

CALIFORNIA: This product does not contain detectable amounts of any chemical known to the State of California to cause cancer.

This product does not contain detectable amounts of any chemical known to the State of California to cause birth defects or other reproductive harm.

CANADIAN REGULATIONS

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS: Class D2B

**CANADIAN
ENVIRONMENTAL
PROTECTION ACT
(CEPA):**

All the components of this product are listed on, or are automatically included as "substances occurring in nature" on, or are exempted from the requirement to be listed on, the Canadian Domestic Substances List (DSL).

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SECTION 16: OTHER INFORMATION

REVISION INFORMATION: Regulatory review of content.

LABEL/OTHER INFORMATION: Not available.

User assumes all risks incident to the use of this product. To the best of our knowledge, the information contained herein is accurate. However, The ArmaKleen Company assumes no liability whatsoever for the accuracy or completeness of the information contained herein. No representations or warranties, either expressed or implied, or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which information refers. The data contained on this sheet apply to the product as supplied to the user.

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